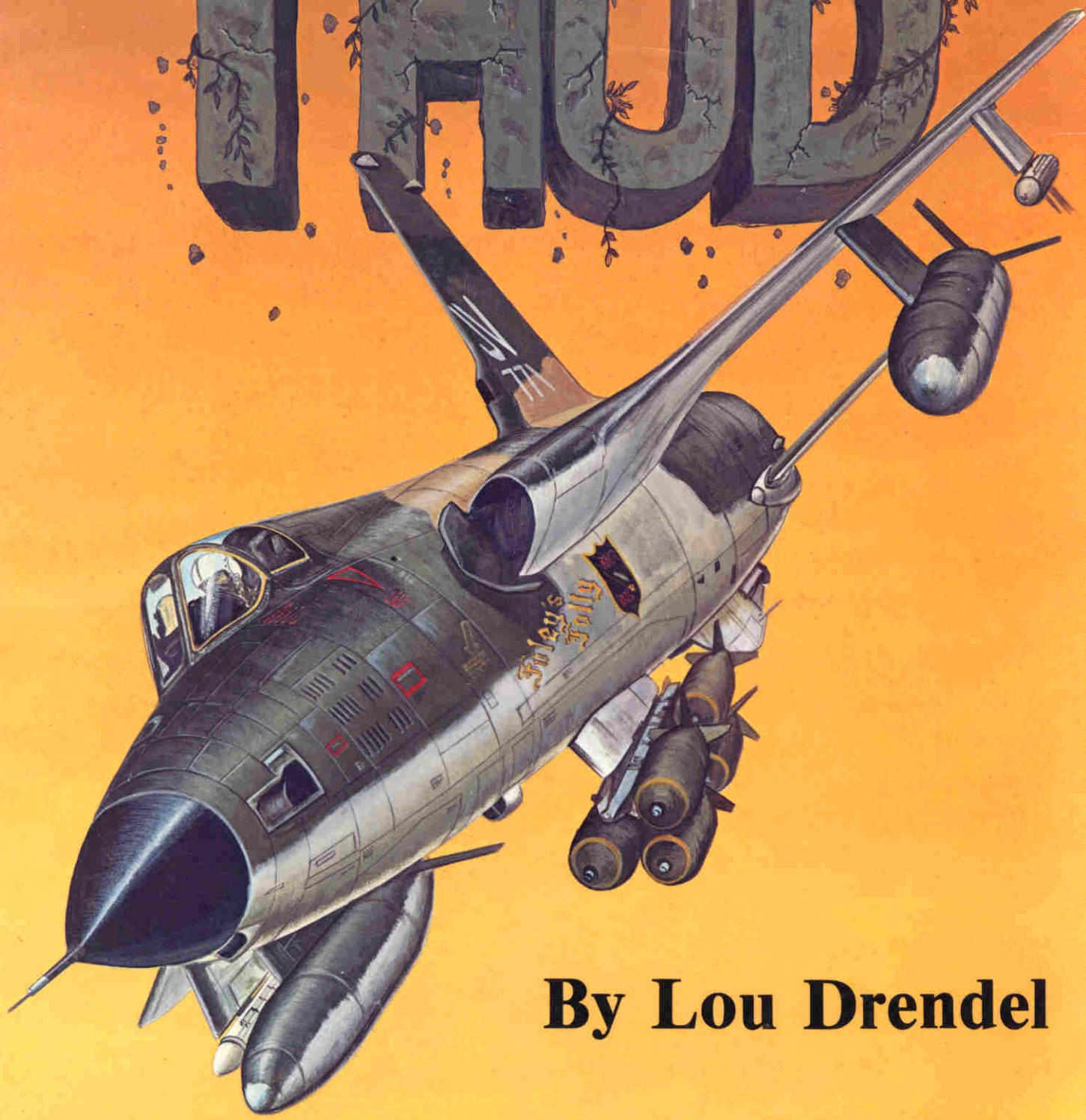
5004

$6.9

MODERN MILITARY AIRCRAFT

THUD



By Lou Drendel

squadron/signal publications

MODERN MILITARY AIRCRAFT

THUD

By Lou Drendel

Illustrated By Lou Drendel

squadron/signal publications

INTRODUCTION

Thud! The nickname that has become the *nom de guerre* for the most heroic of the Century Series of fighters. Thud is a contraction of 'Thunderthud', a most uncomplimentary derivation of the F-105's official name, which was/is 'Thunderchief'. That the F-105, which was without doubt the most advanced of the Century Series fighters when it was introduced, should garner such a label probably came as no surprise to Republic, its manufacturer. The forerunners of the F-105 in the Republic stable of fighters included the P-47 Thunderbolt and the F-84 Thunderjet. The Thunderbolt was a huge fighter for its day, and its looks earned it the less-than-fighter-like sobriquet of 'Jug'. There are those who would tell you that 'Jug' was short for 'Juggernaut', which the P-47 certainly was in the hands of a competent and aggressive fighter pilot, but, really, it was called 'Jug' because it *looked* like a jug, and no one ever called it 'Juggernaut'. 'Jug' may not have looked complimentary in print, and it may have been difficult to utter 'Jug' with reverence or tones of awe in conversation. Still, the P-47 unquestionably earned the respect and admiration of both those who flew it and those who fought it. Pretty is as pretty does, and you can bet that Alexander Kartveli was not losing any sleep over the nickname hung on his very successful fighter.

When the F-84 Thunderjet came along, it earned names like 'Lead Sled' and/or 'Hog'. These were names that described....pretty accurately....its performance. They were not applied in affectionate terms. And when that generation of fighter pilots saw the F-105....the HUGE F-105, with its short wings and internal bomb bay, they immediately drew some very negative conclusions. *Here was the biggest single engine fighter ever built, and it had a bomb bay! How could it be a fighter?* Because of it's size, it had to be the 'Ultra Hog', and was sure to generate considerable decibels when it hit the ground. *Thunderchief? Naw, that's a ThunderTHUD!*

But the derision stopped very quickly as those fighter pilots climbed into the cockpit and discovered that down low the F-105 was the fastest thing that ever took to the sky; that the F-105 was a real pilots airplane, comfortable to fly in spite of its size; that the F-105 was as tough as its World War II ancestor, the P-47; that the F-105 was at the leading edge of 1950's technology. *Thud* quickly became a comfortable nickname. It rolled off the tongue easily, but the snickers and sneers no longer went with it. When the F-105 was called upon to do battle with the toughest air defenses ever seen, the Thud quickly became a name uttered with affection, if not a certain amount of awe. The Thud was the most advanced airplane of its day and would carry a share of the airwar against North Vietnam out of all proportion to its numbers, and it would remain in service for almost three decades! Truly, the THUD was a remarkable airplane.

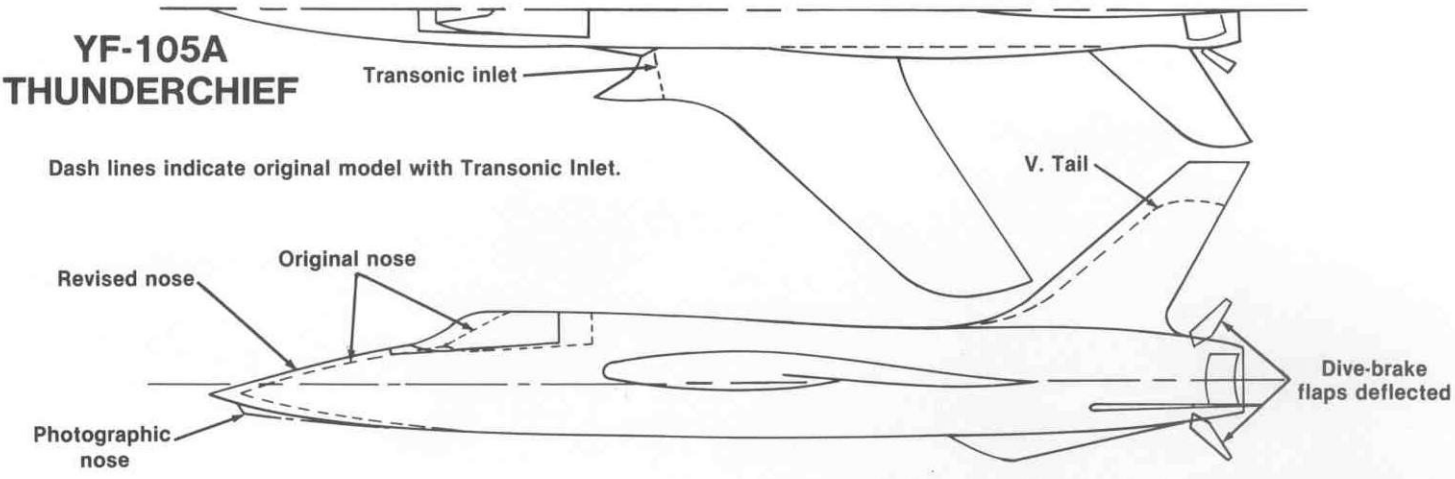
The F-105 was conceived during the most exciting and event-compressed time spans in aerospace history. The immediate post-World War II period was a time when aircraft manufacturers of this country enjoyed the economic well-being that went with years of successful military programs. Their very healthy balance sheets allowed them to experiment with new technology, and to propose new and ever more sophisticated weapons systems to the new Defense Department. The advent of the post-Korean War Cold War provided the *raison d'etre* for a veritable flood of new airplanes, and since the need for them was seldom seriously questioned, they could be 'missionized' on the drawing board, and often survived unchanged through service acceptance. Republic Aviation was certainly interested in continuing their long line of successful military aircraft beyond the F-84, which had done yeoman duty in the ground-attack role in Korea as the straight-winged F-84E and G, and was later updated as the swept-winged F/RF-84F.

(Above) The second of two YF-105A prototypes which flew with the Pratt & Whitney J-57-P-25 engine. This was the only Thunderchief to fly with a non-segmented exhaust. Edwards AFB, 25 May 1956. (Republic)

One of the results of the Korean War was the professed unwillingness to become embroiled in any further *Police Actions* that we did not intend to go all out to win. And going all-out meant using the big one. And using the big one prior to the age of the ICBM meant aerial delivery. Another result of the Korean War was the realization that the other guys might possess interceptors that would make crewing a bomber hauling *the big one* into the enemy heartland the kind of career that meant you weren't likely to collect Social Security. What the Air Force needed was a fast.....like supersonic fast, and low down.....like in-the-weeds low down, fighter-bomber, capable of carrying those unthinkables, and delivering them with enough accuracy to assure mission success. And that meant a bigger engine and an internal bomb bay, which in turn meant the biggest fighter ever.

The forerunner of the F-105 was the AP-63, a Company-funded project which was first submitted to the Air Force' in 1952. The 'AP' had started out as 'Army Proposal', but after USAF came into being, was changed to 'Advanced Project'. The original AP-63 design looked almost exactly like an RF-84F, and while the Air Staff approved of the project, they did not want an F-84 clone. Republic was charged with designing an all-new airplane, and a letter contract for 199 F-105s was delivered to Republic in September of 1952. An initial operational capability date in 1955 was specified.

Practically all aircraft designers were now pushing the outer edges of the known performance envelope, and succeeding more than they were failing. This led to great expectations from the customer, and when Republic did not live up to these expectations, the Air Force showed its displeasure by shrinking or cancelling portions of the contract. The contract had been officially announced in March of 1953. It had called for thirty-seven F-105s and nine RF-105s, all powered by the untested 10,000 pound thrust Allison J-71 jet engine. The full scale mockup was unveiled and approved in October of 1953, but delays with the engine and other aspects of the program resulted in cancellation of the entire program by year's end. Less than sixty days later the program was resurrected, this time with the engine that would ultimately breath firey life into the Thud....the monster 16,000 pound thrust Pratt &



Whitney J-75. But the J-75 would not be ready for the first F-105s built, and when the first YF-105A made its maiden flight on 22 October 1955, it was powered by the smaller 10,000 pound thrust J-57 engine, the engine that was used in the much smaller F-100 Super Sabre. A second YF-105A was also built using the J-57 engine. Neither of these initial F-105s had the area ruled 'coke bottle' fuselage that would ultimately make the Thud such a sterling performer.

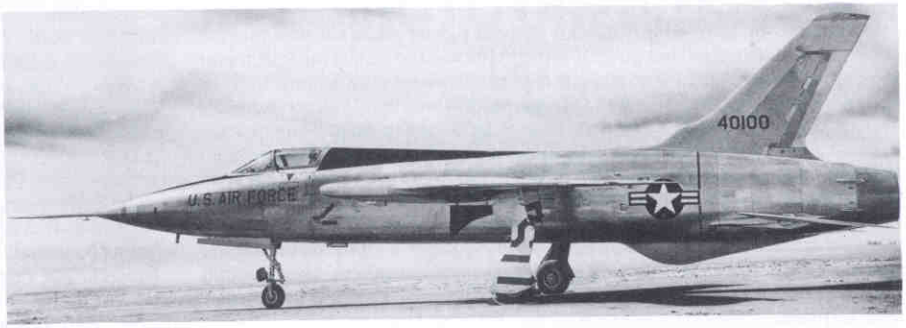
The next generation of Thuds was radically different. The F-105B, which made its maiden flight on 26 May 1956, had the NACA area ruled fuselage and the big J-75 engine, with 23,500 pounds of thrust in afterburner. Another feature that distinguished the B model from the two prototypes were the swept forward flat jet intakes, which were redesigned and enlarged to provide the tremendous volume of air ingested by the J-75 engine. Four F-105B-1-RE Thunderchiefs were built (serial numbers 54-0100 through 0103). They were followed on the production line by five F-105B-5-RE, serialed 54-0104, 0106, 0107, 0109, and 0110. Interspersed on the production line were the first two JF-105B-1-RE aircraft (serial numbers 54-0105 and 0108), which featured the reconnaissance nose and were prototypes for the intended RF-105 which was never manufactured. One more JF-105 was built, as a block 2 aircraft, and serial numbered 54-0112. All JFs were eventually used as instructional airframes. Only one F-105B-6-RE was built (serial number 54-0111), and was the first Thunderchief delivered to an operational squadron, the 335th Tactical Fighter Squadron (TFS) at Eglin AFB, Florida. It was delivered two years to the day after the maiden flight of the F-105B.

The 335th was one of four squadrons comprising the 4th Fighter Wing based at Seymour Johnson AFB, South Carolina. The 335th was tasked with accomplishing Category II testing of the F-105, and was reassigned to Eglin AFB, where all of the Air Force weapons testing was done. They were further equipped with nine F-105B-10-RE (serial numbers 57-5776 through 84), and eight of the eventual twenty-two F-105B-15-RE (serials 57-5785 to 57-5802) built. It took almost a year to deliver all of the 335th's airplanes. The last of the B models built were thirty-eight F-105B-20-REs (57-5803 to 5840) and all went to the 4th, which became the first USAF wing equipped with Mach Two strike aircraft.

The definitive version of the Thud, the F-105D made its first flight in June of 1959. Three F-105D-1-REs were built (serials 58-1146-48). The F-105D had the larger J-75-P-19W engine, which delivered 26,000 pounds of thrust in afterburner with water injection. It was equipped with Doppler Navigation, and the Thunderstick fire control system. As the first D models rolled off the production line, USAF had committed to a production run of 1,500. This was eventually pared down to 66 F-105D-5-RE (serials 58-1149-1173, 59-1717-1757), 45 F-105D-6-RE (serials 59-1758-74, 59-1817-26, 60-0409-26), 121 F-105D-10-RE (serials 60-0427-0535, 60-5375-85), 66 F-105D-15-RE (serials 61-0041-106), 55 F-105D-20-RE (serials 61-0107-61), and 80 F-105D-25-RE (serials 610162-220, 62-4217-37). The F-105D-25-RE was considered the production standard model, and all other models were eventually brought up to this standard under Project 'Look Alike'.

A further thirty-nine F-105D-30-RE (serials 62-4238-76), and 135 F-105D-35-RE (serials 62-4277-4411) models were built. Improvements included a new instrument panel which featured a redesigned layout for more logical scan pattern when flying IFR. Vertical tape instruments were introduced to display airspeed/mach and vertical velocity/altitude. An attitude director indicator was installed which displayed roll, pitch, and yaw information as well as a glide slope for ILS landings. There was also an HSI (horizontal situation indicator) added which combined the directional gyro and course deviation indications of a standard TACAN set.

The final production version of the Thud was the F-105F, built in answer to a perceived need for a two seater. The two seat Thunderchief had been proposed and studied twice previously, as the F-105C and F-105E, so Republic was able to respond rather quickly to the Air Force request to build a two seat Thud. The two seat C model had been offered to the Air Force as a trainer, and the two seat E model as an all-weather fighter-bomber. Both had been refused because of budgetary limitations. When the two seat F model was requested, it was as a combination trainer/all-weather attacker. 143 F-105F-1-RE (serial numbers 62-4412-47, 63-8260-8366) were built. They replaced a like number of scheduled D models on the production line, and were the last Thunderchiefs built, bringing the production total to 833.



(Above) The first F-105B, which introduced the area ruled fuselage and rear-swept air inlets. It was belly landed on its first flight, 26 May 1956 at Edwards AFB when the nose wheel refused to extend. (Republic)

(Below) The third F-105B taxies out for takeoff at Farmingdale. Early B models featured small windows behind the canopy. (Republic)

(Above) F-105B-20-RE with an unusual experimental weapons carriage configuration consisting of twenty-six 500 pound bombs. The multiple triple ejector racks on the centerline were never used operationally. (Republic)

(Below) D-10 equipped with a LAU-3 rocket pod on the outboard station and a 450 gallon fuel tank on the inboard wing station. (Republic)

(Above) The tenth 'D' model featured a very flashy paint scheme, from its instrumented nose probe to the tip of its vertical fin. (Republic)

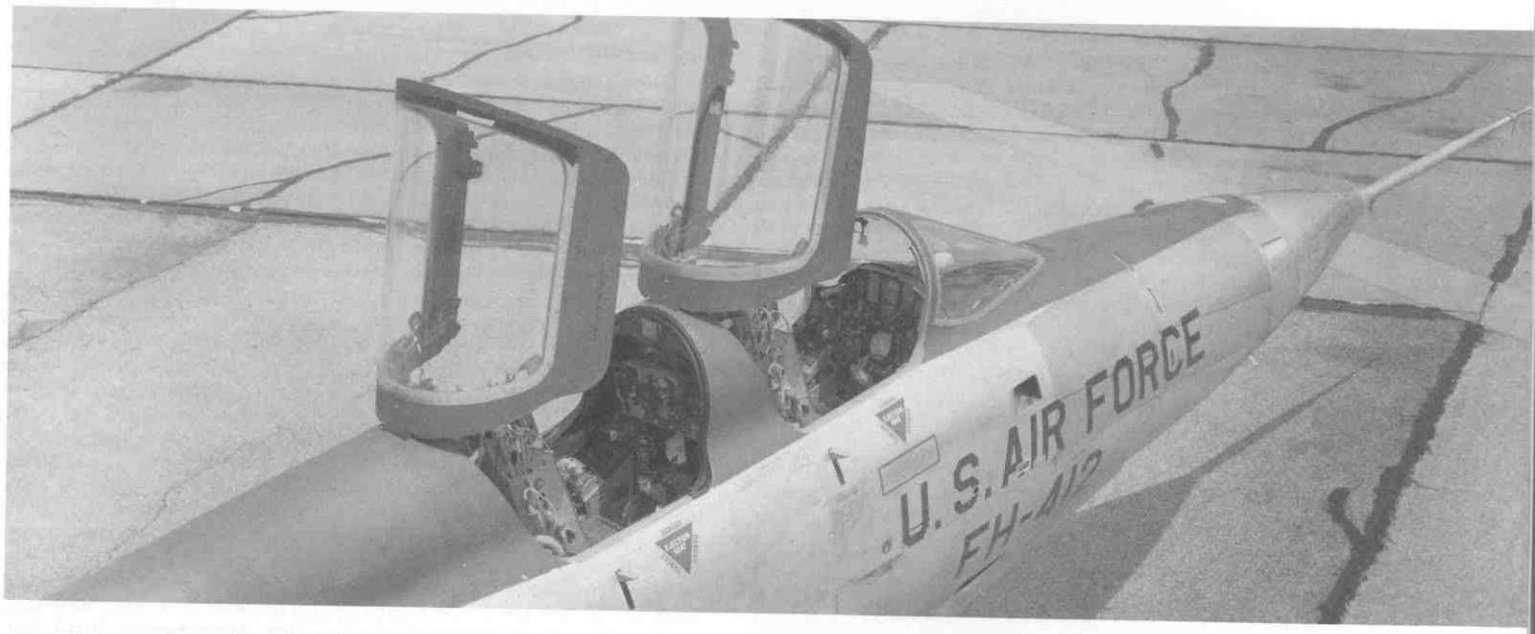
(Below) F-105D-6-RE loaded with napalm (BLU-1B) for drop tests. The Black and White segmented circles on fuselage and tail are to aid in photo interpretation. (Republic)

(Above) D-10 at Farmingdale. 58-1155 was a block 5 production aircraft and one of sixty-six F-105D-5-REs built. (Republic)

(Below Left and Below) Two views of the drag chute installation on the F-105D. The aircraft on the right is a D-6-RE which does not have the arresting hook that would be installed on later models. (Republic)

(Above) The full scale mockup of the two seat F-105F cockpit in Republic's Farmingdale assembly plant. The 'Buzz Number' (FH-100) was never carried on a two seat Thud; it was, however, carried on an F-105B-5-RE. (Republic)

(Below) The first F-105F (62-4412) with instrumented nose probe and a full complement of dual flight controls. The rear cockpit of late model two seat Thuds was dedicated to the duties of the Electronic Warfare Officer (EWO). (Republic)



The second F-105F fresh off the assembly line, carries the new Aluminized paint finish at Farmingdale, 8 July 1963. (Republic)

INTO SQUADRON SERVICE

REPUBLIC'S ULTRA HOG

(Sung to the tune of WABASH CANNONBALL)

Listen to the jungle, the gruntin' and the wheeze,
As she rolls along the runway, by the Back 9 and the trees.
Hear the mighty roarin' engine as you leap off in the fog,
You're flying through the jungle in Republic's Ultra Hog!

We came up from old Korat one steamy summer day,
As we pitched up on the target you could hear all the gunners say,
'She's big and fat, and ugly; she's really quite a dog,
She's known around the country as Republic's Ultra Hog!'

Here's to MacNamara, his name will always smell.
He'll always be remembered down in Fighter Pilot's Hell.
He frags all the targets and sends us out to die,
He sends us into combat in Republic's 105.

(song sung in the Korat 'O' club)

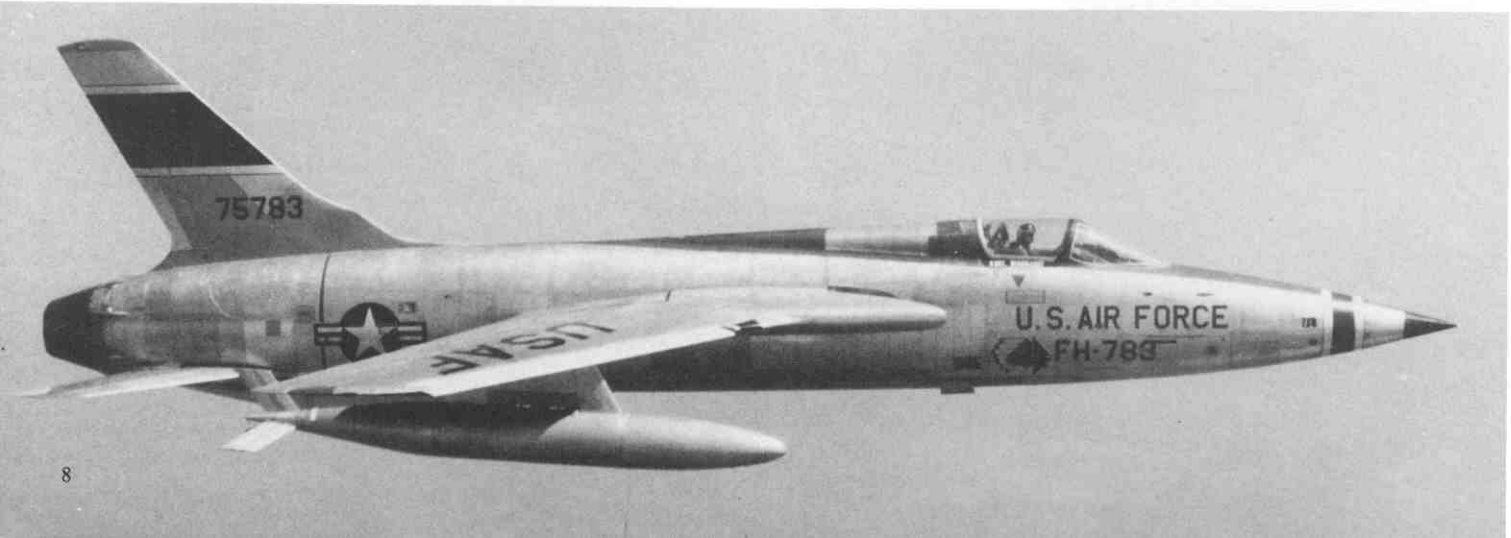
The 4th TFW was the first wing to operate the Thud, beginning with the F-105B, which was flown by the 334th and 335th squadrons. In addition to much of the final test work on the Thud, the commander of the 4th, Brigadier General Joseph H Moore, set a new closed course speed record. This record flight was flown at an altitude of 38,000 feet over Edwards AFB, California, and was the first time that the closed course record had been flown at any altitude other than down low, where a pilot could fly around pylons. Ground radars and cameras tracked the Thunderchief around the course, while Republic Test Pilot Rusty Roth called Moore's turns from the ground, including how many Gs should be pulled and held in the turn! The record attempt lasted three minutes and averaged 1,216.48 mph.

The 4520th Combat Crew Training Wing (CCTW) was activated in March of 1961 at Nellis AFB, Nevada and was charged with providing training for new Thud pilots. The 4520th was also the first unit to receive the new F-105D. The next unit to get the Thud were USAFE's 36th TFW at Bitburg Air Base, Germany and the 49th TFW. The 36th TFW squadrons were the 22nd, 23rd, and 53rd, and they received their 105s in that order, beginning in May of 1961. They were followed by the 49th TFW, whose 7th, 8th, and 9th Tactical Fighter Squadrons were based at Spangdahlem Air Base, Germany.

All four squadrons of the 4th Wing were eventually equipped with ninety-six F-105Ds by mid-1964. Before the conversion was completed, however, the F-105 came close to receiving its baptism of fire. On 18 October 1962 TAC OPLANS 312, 314, and 316 alerted the 4th TFW for war. The wing deployed to McCoy AFB, Florida on 21 October for possible use against targets in Cuba. The first serious brinksmanship drama was being played out as President Kennedy prepared to face down Russian Premier Khruschev on the subject of offensive nuclear missiles based in Cuba. The 4th TFW was put on *one hour* alert status on the morning of the 22nd, and as the crisis mounted, went to a *fifteen minute* alert status that afternoon. They sat on the ground in various stages of alert for five days before downloading their bombs in favor of air-to-air missiles which they carried on routine patrols over Florida, expecting to intercept Russian or Cuban bombers.

Eventually the crisis subsided when Khruschev agreed to remove his missiles in exchange for American guarantees of Cuban sovereignty. At the time, it was generally agreed that the Russian had blinked in the eyeball-to-eyeball confrontation with Kennedy. However, the Russians achieved a very important concession with the American guarantee to keep hands off Cuba, while the Kennedy administration did not at the same time require a *demilitarized Cuba*. The Cuban Missile crisis, coupled with the abortive Bay of Pigs Invasion the year before, insured a festering sore in Pan-American solidarity and undoubtedly contributed to communist plans to further test American resolve elsewhere in the world.

The production line at Republic continued to turn out new Thunderchiefs, and eventually eight wings were equipped with the F-105, including, in addition to those already mentioned, the 355th, 8th, and 388th in 1962, the 18th in 1963, and the 23rd in 1964. These units were busy showing the flag on worldwide deployments, demonstrating that USAF was ready to live up to President Kennedy's admonition *to bear any burden* to preserve freedom. But flag-showing was peacetime bluff, and the peacetime career of the Thud was about to be overshadowed by the beginning of a wartime career that would be nothing short of spectacular... and heroic.



(Below) F-105B-10-RE of the 335th TFS in natural metal finish. Dark Green nose and tail bands. Leading edge flaps are extended to enhance low-speed maneuvering. (Republic via George Miller)

The last Thunderchief was rolling down the production line when the Thud flew its first combat mission in August of 1964. The 36th TFS, of the 18th TFW was deployed from Okinawa to Thailand in response to the Tonkin Gulf Incident, and the resulting Congressional resolution which gave President Lyndon Johnson sweeping war powers. Following the 36th, several more F-105 units were destined for combat in Southeast Asia. One of the first of these was the 563rd TFS. Captain Martin V Case, Jr was a pilot in the 563rd, and he gives the following account of OPERATION TWO BUCK CHARLIE.

The 563rd TFS was alerted for deployment to Southeast Asia under OPLAN 32P on 6 April 1965. The next two days were very busy ones for all concerned. The mobility package and the aircrews on the Initial Support Team departed on 7 April. Pilots on the first deployment were Captains Kile D. Berg, Jack L. Fowler, Paul W. Hanson, Thomas D. Scott, Robert C. Wistrand and Charles N. Warner. The eighteen F-105s and pilots of the 563rd launched at 1000L, 8 April 1965.

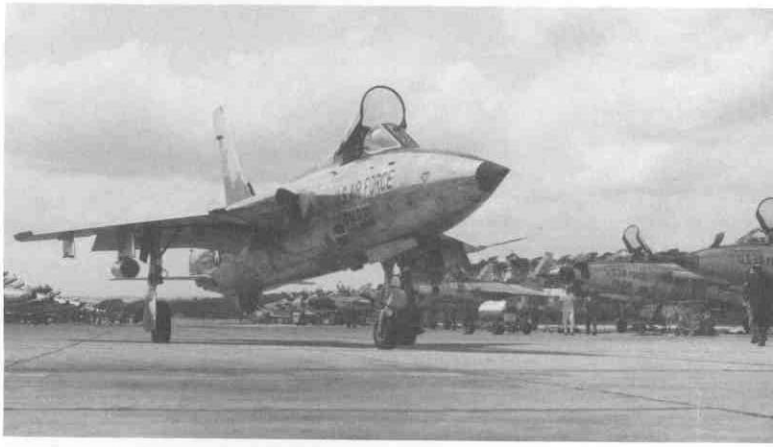
Major Jack Brown, Squadron CO
Major Wayne Harris, Ops
Major Billy Ellis, Asst Ops

Captain Norlen Daughtrey
Captain Dave Hrdlicka
Captain Bob Jackson
Captain Ken Johnston
Captain Larry Lighty
Captain Al Logan
Captain Ed McCabe
Captain Craig Miller
Captain Jim Rhodes
Captain Bill Sauers
Captain Ken Schow
Captain Bill Sparks
Captin Rull Violett
Captain Dick Vogel
Captain Sam Woodworth

The deployment was outstanding in all respects. Enroute stops were made at Hickam AFB, Hawaii and Andersen AFB, Guam. Our KC-135 tankers did a fine job. Our final destination and operating location remains classified. (Authors note: At the time of this writing those "operating locations" at Korat and Takhli were classified.)

The first combat missions were flown by the 563rd on 14 April. All told, 177 combat sorties were flown by the 563rd during April. We had come to know Laos and North Vietnam as well as our local area back at McConnell. A few of the more notable missions included a massive strike on three important bridges in North Vietnam on 16 April in which all three bridges were destroyed; a leaflet mission on 19 April which saw eight million propaganda leaflets dropped over North Vietnam; the destruction of the Ly Nahn highway bridge on 22 April; the use of AGM-12Bs against the Vinh highway bridge on 24 April; and the destruction of the Ly Buc Thon highway bridge on 26

(Above) Auxiliary Power Unit (APU) connected to the nose of an F-105B of the 335th. Vents on the nose are for the Air Turbine Motor (top) and the shell case collection compartment (left). The 'B' model truly was a 'needle nose'! (Republic)



(Above) F-105Bs of the 4th TFW taxi for take-off during their 'show the flag' deployment to Germany in 1961. This was a time of maximum tension between east and west, with a possibly cataclysmic confrontation over Berlin continuously simmering. Demonstrations of US worldwide tactical strength were the order of the day. (Dave Menard)

(Below) The Thunderbirds flew the Thunderchief briefly in 1964, until one of their B models came apart during an airshow at Hamilton AFB, California. This resulted in the grounding of all Thuds until a fix to the suspected structural member could be engineered and installed. By that time the Thunderbirds had returned to a familiar mount....the F-100 Super Sabre. (Republic)

(Above) An early F-105D contributes to the sound and fury of the Nellis AFB flight line with its black powder cartridge start system prior to a training flight by the 4520th Combat Crew Training Squadron (CC-TS). (Republic)

(Above) F-105Ds of the 36th TFW refuel from a KB-50 tanker. The relative angle of attack of the tanker and the fighters tells all! The tanker is going downhill in order to maintain enough airspeed to keep the Thuds from falling off the hose. (Republic)

(Below) The 335th TFS Chiefs converted to the F-105D in 1964. The colorful peacetime markings were supplanted within a year by camouflage as the Thud went to war. (Republic)

April. The 563rd suffered its first combat loss on 17 April when Captain Sam Woodworth was killed on a rocket pass in North Vietnam. Several of our big Thunderchiefs received damage during the month. Pilots who flew combat during April were Col Edwards, Majors Brown, Harris, Ellis, Cole, Pogreba; and Captains Berg, Fowler, Hanson, Hrdlicka, Jackson, Johnston, Lighty, Logan, Miller, Rhodes, Sauers, Schow, Scott, Sparks, Violett, Vogel, Warner, Wistrand, Woodworth, Daughtrey McCabe, and Reed.

MAY 1965

May found a large increase in fragged sorties. The summer monsoon also started which hampered our flying considerably, especially in the target areas of North Vietnam and Laos. The most important targets included the Xon Run ammo storage area, the Phu Ban ammo storage area, the Thahn Hoa bridge (the most heavily defended target in North Vietnam at that time), the Xon Thung Barracks, the Phuc Que Army barracks, and the Hoai An ammo storage area. Many Barrel Roll road cut and Steel Tiger armed recce missions were flown. We were also introduced to Queen Bee escort missions. One of the most hazardous and most important missions we flew were the rescaps for downed pilots. Captains Bob Wistrand and Dave Hrdlicka were shot down during May and are listed as Missing In Action. Combat sorties flown by the 563rd totaled 408. The pilots were Col Edwards, Majors Brown, Harris, Ellis, Cole, Buttelmann, Captains Axley, Berg, Carson, Fowler, Hanson, Hatten, Herndon, Hrdlicka, Jackson, Johnston, Kiernan, Kosko, Lighty, Miller, Nine, Rhodes, Sauers, Schneider, Schow, Scott, Sparks, Vogel, Violett, Warner, and Wistrand.

JUNE 1965

June found the summer monsoon in full force. Without exception, flights had to rendezvous with the tankers, navigate to the target, and bomb through numerous thunderstorms, and poor visibility. The pilots of the 563rd Tactical Fighter Squadron were more than equal to the challenge.

The 563rd had tried in vain since April to find and shoot down MiGs of the North Vietnamese Air Force. Many flights had flown in the "MiG local area" near Phuc Yen Airfield, northwest of Hanoi, trying to get the MiGs to fight. In spite of several MiG Red alerts, the squadron had yet to find any. They just wouldn't fight except under conditions of their own choosing. On 24 June a flight of two MiG-17s bounced a flight of four F-105s from the 563rd TFS. Major Jack Brown was lead, Captain Dick Moore was two, Major Henry Buttelmann was three, and Captain Al Logan was four. The MiGs came out of the clouds and bounced number four. Captain Logan was able to out-accelerate the MiG and shake him off his tail. The MiGs turned tail and went into the clouds before the first element could close in. Results — a standoff.

The 563rd continued to move further north into North Vietnam. By

(Above) A Dart TDU-10B towed target is carried under the wing of a 335th TFS Thud. (Republic)

(Above) MJ-1 bomb loader hoisting a nuclear 'shape' into the bomb bay of a Thud belonging to the 335th TFS. (Republic)

(Below) Clean, natural metal F-105D of the 335th TFS prior to Project Look-Alike. (Republic)

(Above) F-105D being towed. The open access panel exposes the utility hydraulic accumulators. (Republic)

(Below) An F105D model of production block 5 belonging to the 4520th Combat Crew Training Wing (CCTW) over the Nevada desert. (Republic)

the end of the month, the squadron was attacking targets close to the Red River Valley. Some of the targets hit during June included the Hoai An ammo storage area, the Ben Quang Barracks area, the Phu Qui ammo depot, the Vinh army depot, the important Son La army barracks and storage area, and the Ban Nuock Chieu ammo storage area. The arrival of the 9th RTF, flying RB-66Cs, enabled us to bomb areas such as Vinh, which were heavily defended by radar controlled 85MM and 57MM guns, with virtual impunity. The troops in the 9th RTF did an outstanding job in jamming the radar controlling these normally potent guns. Many more road recce missions were flown in North Vietnam. These missions enabled the 563rd to virtually wipe out all military targets south of the 19th parallel.

Activities in Laos increased during June, in spite of the bad weather encountered. A successful rescap operation was conducted in "Happy Valley" near Sam Neua on 4 and 5 June. This valley contained no less that sixty-eight AAA guns. The pilots of the 563rd destroyed almost all of these guns in order that a downed Navy pilot could be rescued. The choke points on routes 6, 65, 7, 8 and 12 were bombed almost every day.

The 563rd TFS participated in an historic "first" for the F-105. The squadron was notified on 25 June to deploy six aircraft from our forward operating base to Tan Son Nhut AB, RVN, for two days. Two hours after the alert notification was received, all six F-105s were airborne. The support personnel and equipment followed by C-130.

The next two days saw the 563rd flying the F-105D with its maximum ordnance load of sixteen 750 pound bombs and 20MM gun against Viet Cong targets. This was the first time the 105 had used this load in combat. The results were outstanding in all respects. 232 bombs were dropped in seventeen sorties flown out of sixteen fragged. Everyone connected with the operation did a fine job. The pilots were Major Harris, Captains Schoonover, Lighty, Moore, Johnston, Logan, Sauers, and Van Horn.

A total of 345 combat sorties were flown during June by the 563rd TFS. The pilots that flew these missions included Col Edwards, Majors Brown, Harris, Ellis, Cole, and Buttlemann, Captains Axley, Berg, Carson, Fowler, Hanson, Hatten, Johnston, Kiernan, Kosko, Lighty, Logarn Miller, Nine, Rhodes, Sauers, Scott, Sparks, Violette, Craw, Case, Moore, Dortch, Schoonover, and Van Horn.

(Below) A flight of Thuds returning to Nellis after a training mission. Several of these aircraft were transferred to the 4th TFW during the Cuban Missile Crisis. (USAF)

(Above) F-105D of the 18th TFW, which was stationed at Kadena AB, Okinawa, while TDY to Osan AB, Korea in July of 1963. Two significant details of the aircraft in the foreground are the Blue nose band with a White number '10' behind a radome that is painted the same Silver color as the rest of the airplane (the two aircraft in the background also have Silver radomes, with Yellow and Red bands) and the unidentified store (with a suspiciously nuclear shape) on the inboard wing station. (Copsey)

(Above) F-105D-10-RE of the 36th TFW at Hahn AB, Germany during 1961. (Dave Menard)

(Below) F-105F of the 18th TFW, Kadena AB, Okinawa. Black-edged Yellow tail bands, Pacific Air Force (PACAF) tail badge, and squadron color-coded band behind the radome.

(Below) F-105F fresh from an Inspect and Repair as Necessary (IRAN) overhaul in 1964, with its last coat of Silver paint (the following year all F-105s began to come out of IRAN with camouflage). Afterburner cooling scoops have been added to the rear fuselage. (Republic)

(Above) F-105F with the somewhat unusual configuration of three 450 gallon fuel tanks.

(Above) Under Project Look-Alike all Thuds were painted Aluminum and individual squadron markings became increasingly rare. This F-105D-25-RE is seen during 1962. (via Jerry Geer)

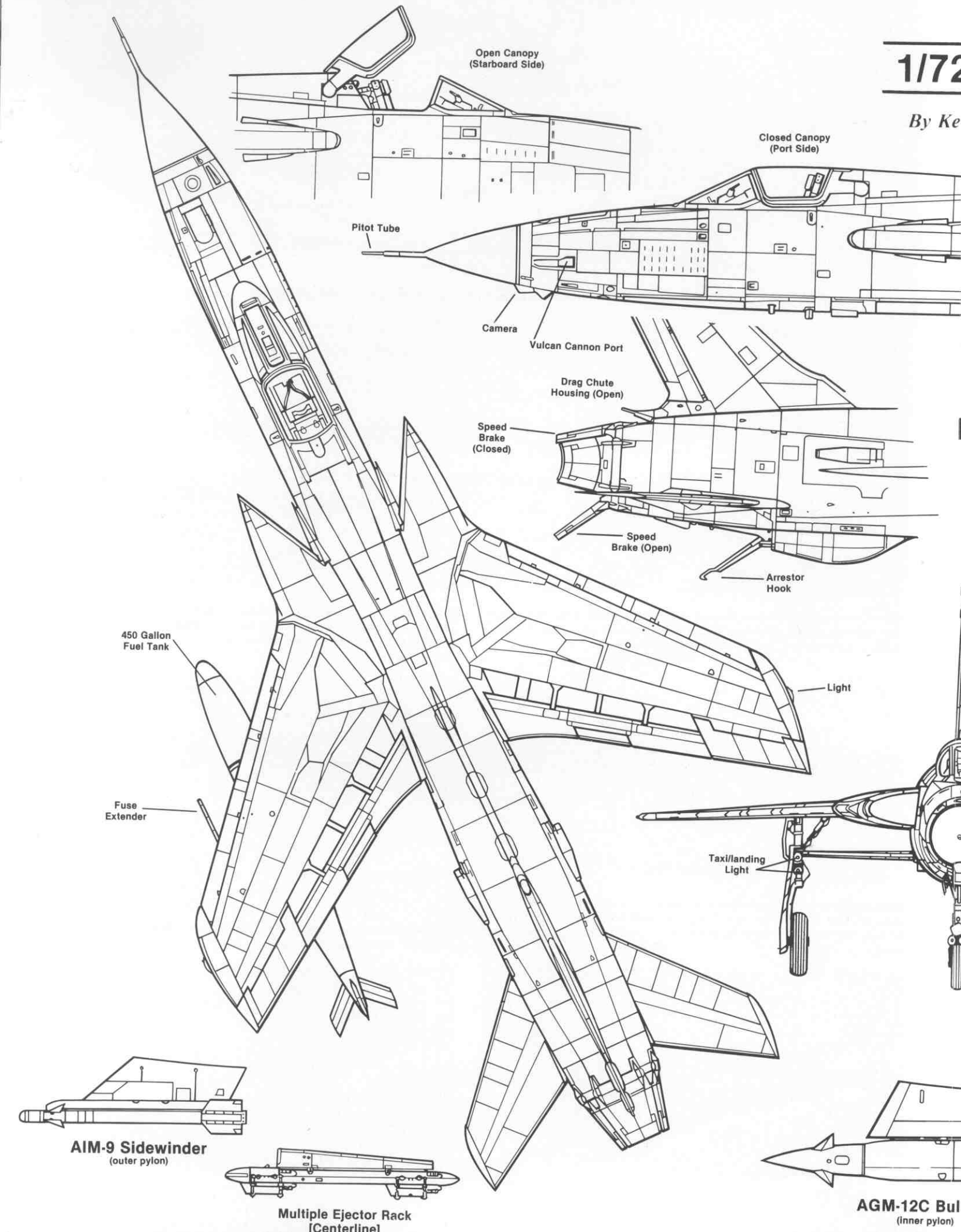
(Below) F-105Ds of the 23rd TFW during OPERATION DESERT STRIKE (Olive Drab fuselage stripes have been applied for this exercise). This was one of the last large peacetime joint service exercises prior to the Vietnam War.

(Below) Some squadron markings began to reappear in 1963-64, as seen on this 18th TFW Thud. The 18th used Red, Blue, and Yellow arrows on the intake sides to designate squadrons. (Col David Everson)

(Below) The hallmark of the 23rd TFW has always been the sharkmouth, and their Thuds carried it during 1963-64. (Col David Everson)

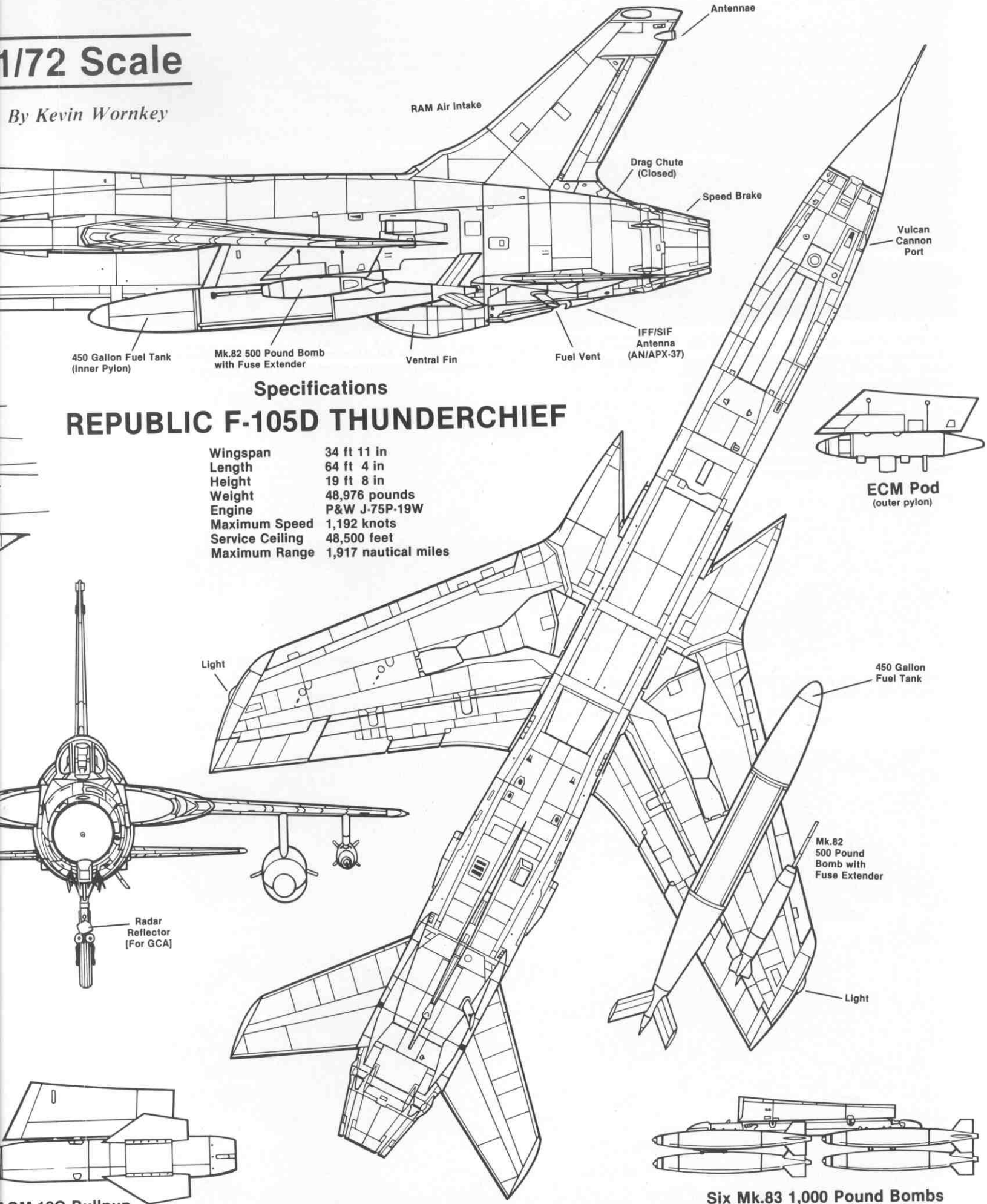
1/72

By Ke


Open Canopy
(Starboard Side)
Closed Canopy
(Port Side)
Pitot Tube
Camera
Vulcan Cannon Port
Drag Chute
Housing (Open)
Speed
Brake
(Closed)
Speed
Brake (Open)
Arrestor
Hook
450 Gallon
Fuel Tank
Light
Fuse
Extender
Taxi/landing
Light
AIM-9 Sidewinder
(outer pylon)
Multiple Ejector Rack
[Centerline]
AGM-12C Bul
(inner pylon)

1/72 Scale

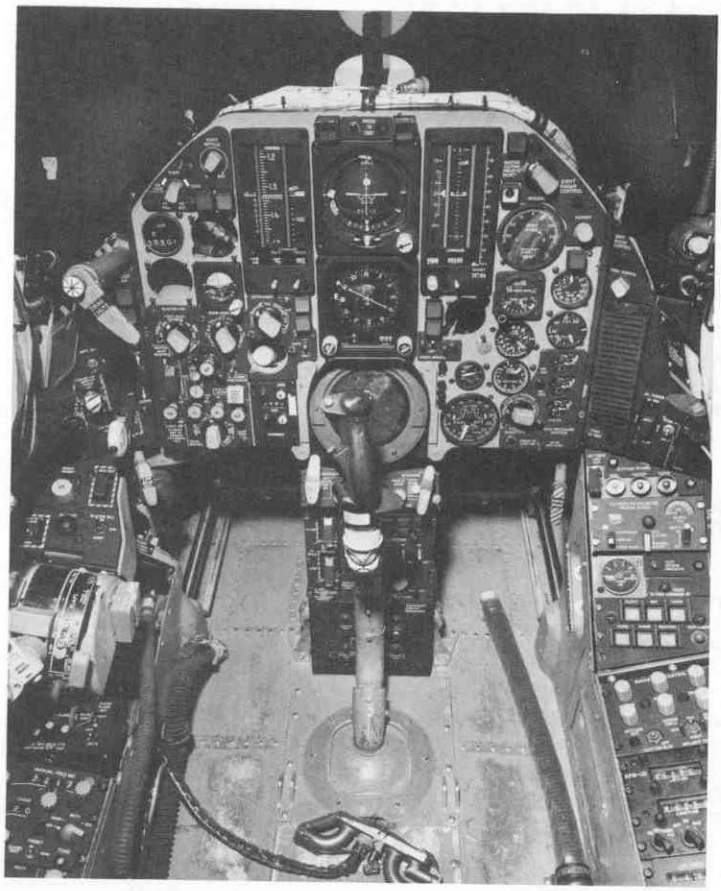
By Kevin Wornkey



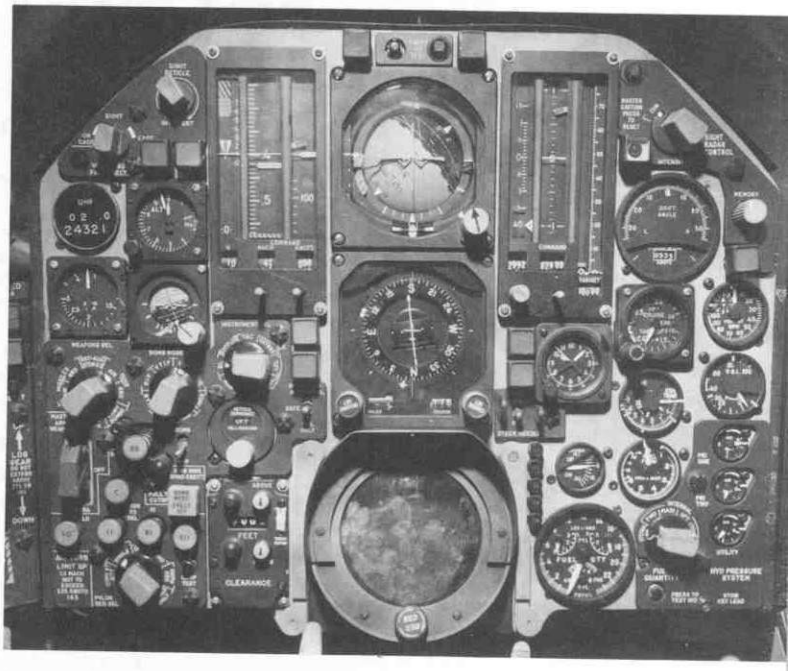
Specifications

REPUBLIC F-105D THUNDERCHIEF

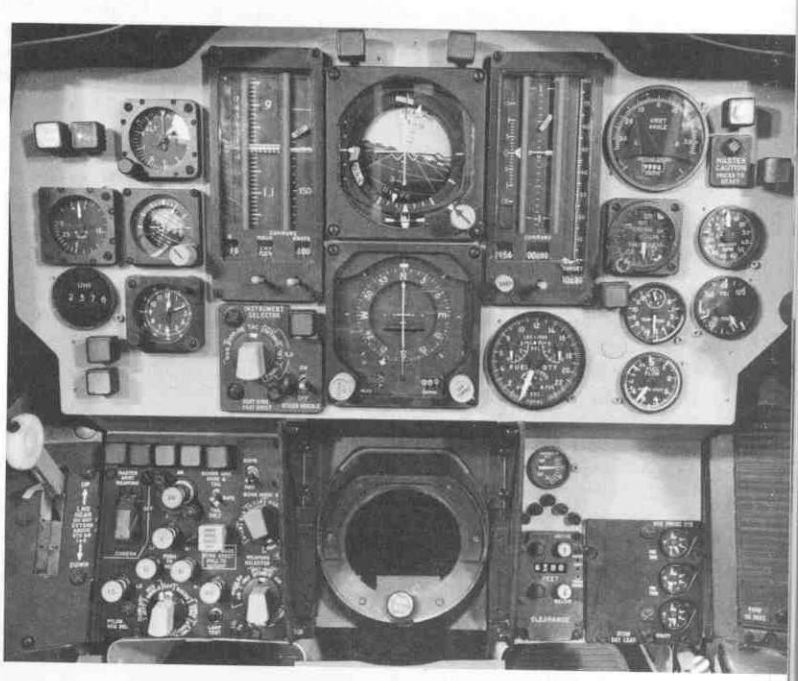
Wingspan	34 ft 11 in
Length	64 ft 4 in
Height	19 ft 8 in
Weight	48,976 pounds
Engine	P&W J-75P-19W
Maximum Speed	1,192 knots
Service Ceiling	48,500 feet
Maximum Range	1,917 nautical miles



(Above) The front office of the F-105D, with instruments well arranged for IFR flight. The attitude indicator/flight director is centered, HSI is below, and tape instruments indicating airspeed, vertical velocity, altitude are on the left and right.

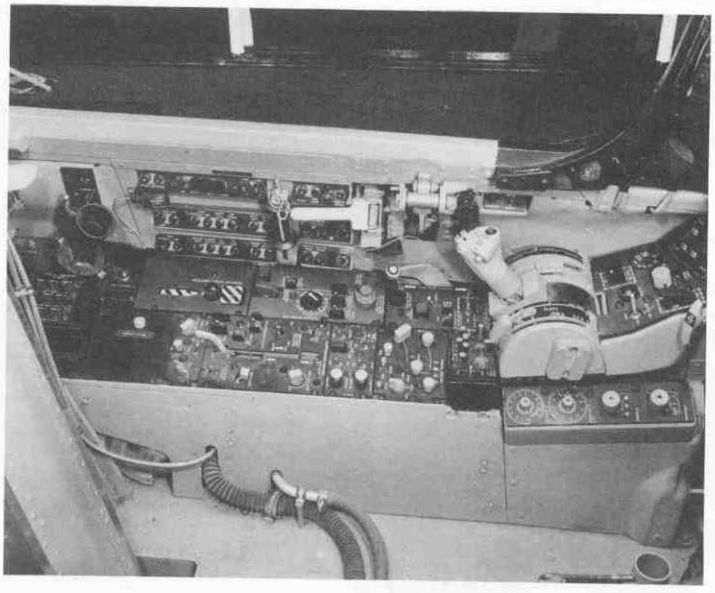


(Above) Close up of the F-105D panel.

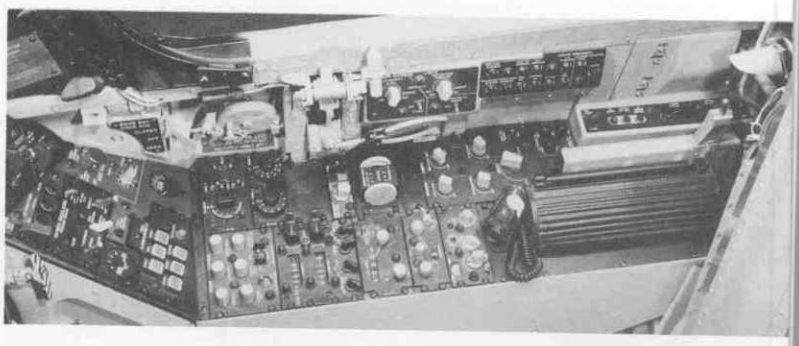


(Above) The rear panel of the F-105F when configured as a dual control trainer.

(Below Left) Left console of the F-105D, which contained throttle quadrant, primary com radio, autopilot controls, and environmental controls.



(Below Right) Console of the F-105D contained Nav radios, IFF (transponder), and light control panel.



ROLLING THUNDER

THE THUD DRIVERS THEME

(sung to the tune of the Whiffenpoof Song)

From hootch in Southeast Asia,
To the place aces dwell,
To the strip club down at Zuke
We knew so well.

Sing the fighter jocks assembled
With their glasses raised on high,
Sing they poorly, not too clearly,
Loud as well.

We will throw our glasses wildly,
And throw our bombs as well,
And the finks in Two A.D.
Can go to hell.

chorus

We are poor fighter jocks
Who have lost our way
Help! Help! Help!
We flew to the town
Of Hanoi today,
Help! Help! Help!
Lead got zapped by an SA-2
Let's haul ass or they'll
Zap us too!
A.....B.....NOW!!

Rolling Thunder was the name given the aerial campaign against North Vietnam. It was precipitated by the Tonkin Gulf Incident and by the *VC* attack on Pleiku in February of 1965. It was carried out by USAF and units of the U.S. Navy's 7th Fleet from the Gulf of Tonkin. Rolling Thunder lasted from 1965 until the unconditional bombing halt announced by Lyndon Johnson in March of 1968. During its three year history, Rolling Thunder accelerated slowly and in fits and starts while the politicians in Washington reluctantly applied pressure to North Vietnam.

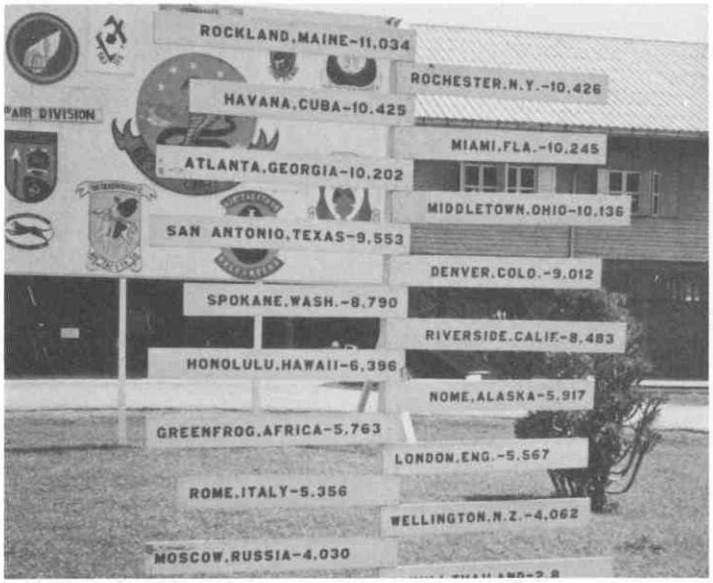
As the 7th Air Force settled in for what promised to be a long campaign, patterns developed that would last throughout Rolling Thunder. The TDY assignment of F-105 squadrons to Thailand gave way to permanent assignment of two wings of F-105s. The 388th TFW was stationed at Korat RTAB, and the 355th Wing was stationed at Takhli RTAB. Together, these wings carried seventy-five percent of the air war to North Vietnam during Rolling Thunder. The F-105 was the best airplane in the world for that job, and its pilots were unquestionably some of the bravest men ever to pull on a G suit. The following narratives are illustrative of the action encountered by Thud pilots and Bears during Rolling Thunder.

(Below Left) F-105Ds of the 563rd TFS, 23rd TFW over South Vietnam in 1964. The 563rd sent several aircraft from Thailand to South Vietnam, for a short tour of duty. It was the only time during the war that the F-105 carried this load (sixteen 750 pound General Purpose bombs), the heaviest frag for a USAF fighter ever. (Jerry Arruda via Norm Taylor)

(Below Right) Captain Ben Allen, of the 562nd TFS at Takhli in 1964. Unusual garb includes a camouflage survival vest, cut-off flight suit with a G suit worn under it! (Ben Allen)

(Above) When the 563rd left Takhli in August of 1965, they turned their aircraft over to the 562nd TFS. The markings of the 563rd were gradually replaced by those of the 562nd. The second aircraft in line still carries 563rd markings while being flown by the 562nd. (Ben Allen)

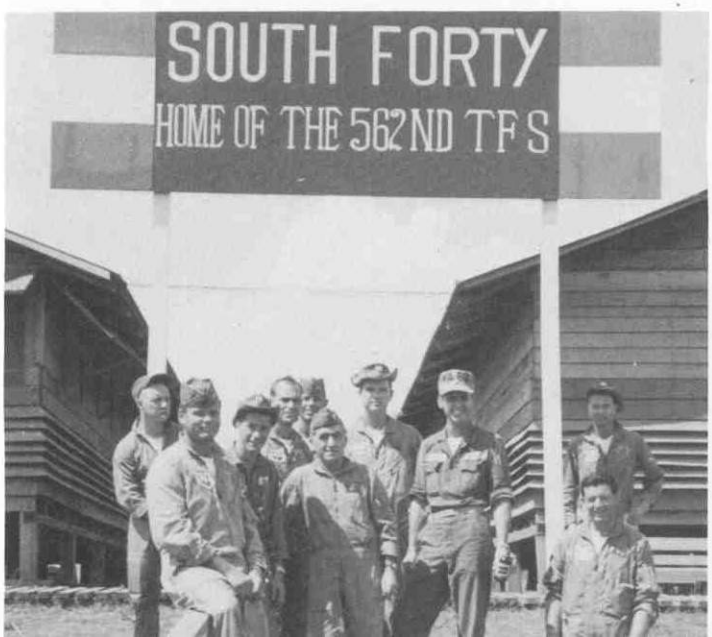
(Above) Thud of the 562nd loaded for a Rolling Thunder mission against North Vietnam. Heavy gun blast residue indicates what an important weapon the 20MM cannon was on armed recce missions. (Ben Allen)



(Above) The American serviceman's habit of erecting signs to show just how far away from everything he was continued during the Vietnam War. This sign was erected at Takhli RTAB. (Ben Allen)

(Above) The 562nd flew combat missions until relieved in December of 1965. (Ben Allen)

(Below) Pilots of the 562nd TFS at Takhli in September of 1965. (Ben Allen)



(Below) A 500 pound present inscribed "To Uncle Ho from The State of New York" was delivered by the 562nd TFS in late 1965. (Ben Allen)

(Above) A Thai bus used by F-105 pilots and aircrew for local travel in the Takhli area during 1965. (Ben Allen)

(Above) The initial camouflaged Thuds began to appear in late 1965. The Thud was the first USAF aircraft to carry camouflage, an indication that it was carrying the brunt of the air war to the enemy homeland. These 4th TFW Thuds are enroute to North Vietnam. (USAF)

(Above) THE LONE STAR SPECIAL was flown by Captain Ben Allen from Takhli RTAB in November/December 1965. The camouflage pattern was standard, but colors were applied in unorthodox positions by IRAN facility. This was the first camouflaged Thud flown by the 562nd. (Ben Allen)

(Below) Thuds of the 562nd on the tanker during pre-strike. In addition to centerline bombs, a popular load early in the war was LAU/3A rocket pods on outboard stations. (Ben Allen)

WILD WEASEL

(sung to the tune of SWEET BETSY FROM PIKE)

Wild Weasel, Wild Weasel, they call me by name.
I fly up on Thud Ridge and play the big game.
I fly o'er the valleys and hide 'hind the hills;
I dodge all the missiles, then go in for kills.
I'm a lonely Thud driver with a shit-hot fine Bear!

The strike mission against North Vietnam on 30 April 1967 was significant because a Medal of Honor winner was shot down. Major Leo Thorsness had flown his 93rd mission over Hanoi that morning. He was within a couple of missions of achieving the *golden* status that was accrued when a pilot approached the hundred mission milestone. At one hundred you were rotated home, and when you got within five, there was an unofficial policy to protect you by assigning the last few missions in the lower route packages, where you were less likely to catch the *golden BB*. Major Thorsness had been assigned spare status on the afternoon mission. Very few knew that he had been recommended for the Medal of Honor for a mission eleven days earlier, in which he had destroyed two SAM sites, shot down one confirmed and one probable MiG, and directed the rescue effort for downed 105 pilots.

The mission, led by the 355th TFW Vice Commander, Colonel Jack Broughton, was against the Hanoi Thermal Powerplant, located seven miles north of Hanoi. The strike force was made up of fifty-four Thuds and Phantoms, divided in their roles between bombers, Wild Weasels, and MiG CAP. When the force launched into CAVU weather that afternoon, the spare Wild Weasel became necessary, and Leo Thorsness joined up as number three. The Weasel flight was:

F-105F	Carbine Lead:	Major Ben Fuller, Pilot
		Captain Norm Frith, EWO
F-105F	Carbine Two:	Captain Joe Ritter, Pilot
		Captain John McGukin, EWO
F-105F	Carbine Three:	Major Leo Thorsness, Pilot
		Captain Harry Johnson, EWO
F-105D	Carbine Four:	Lieutenant Bud Abbott

(Below) Before the air defenses of North Vietnam contained a great deal of SAMs, F-105s were sometimes employed as straight-and-level bombers. Bombs away would be called by an RB-66 bomber leading the formation and determining the drop point with on-board radar equipment. When SAMs became more prevalent, it was considered suicidal to fly at high altitudes over an undercast without frequent maneuvering and constant checking for the appearance of a 'flying telephone pole'. (USAF)

The F-105Fs carried a 600 gallon centerline fuel tank, CBU-24s on the inboard wing stations, an AN/ALQ-71 ECM pod on one outboard station, and an AGM-45 Shrike Anti-radiation missile on the other outboard station. The 390 pound Shrike was a Mach Two missile with a seven to ten mile range, which would home on the radar emissions of the SAM fire control radar. Cluster Bomb Unit-24s (CBU-24s) were anti-personnel weapons intended to kill SAM site crews. The lone F-105D in the flight was armed with six 500 pound bombs on the center line, 450 gallon fuel tanks on the inboard wing stations, an ECM pod on one outboard station and a Shrike missile on the other outboard station.

It was Captain Norm Frith's twenty-third mission over North Vietnam, and he carried a tape recorder in his cockpit, and much of the narrative of this mission is enhanced by the ICS (intercom between pilot and EWO) and UHF communications (radio communications with other aircraft). During much of the radio communications, a survival radio beeper was activated on the guard channel (the universal emergency frequency used for search and rescue) which made accurate interpretation sometimes difficult, occasionally impossible. Many of the radio calls came from aircraft not directly involved in the mission, or in the subsequent rescue operation. Background noise on the tapes consisted of the almost constant warbling of the SAM radar warning, provided by the RHAW gear in the Thuds. This high-pitched staccato chirp was known in the trade as 'the rattlesnake'....a deadly accurate appellation for the Fansong fire-control radars of the SAM-2 missiles.

As carbine flight crossed the Laotion border into North Vietnam, heading for a rendezvous with the bombers at Phu Tho, they began getting MiG calls.

Radio: *This is Motel Weeky, Quebec Fox 33, time 15.*
ICS: *(Fuller) Is that where we're going?*
(Frith) I don't know where that is.

Quebec Fox refers to a pre-briefed set of map coordinates, while *33* refers to either distance or bearing from those coordinates. Unfortunately, the word didn't always get passed down to the mission briefing, and some aircrews would not realize the significance of the coordinates.

Radio: *Waco has strangers....four strangers, nine o'clock high.* (Waco was Colonel Broughton's flight.)

There was more discussion in the cockpit between Fuller and Frith, trying to identify the coordinates *Quebec Fox*. The Hanoi Thermal Power Plant had been given the designation Quebec Charlie, and though they took turns checking the map and doing the flying for a couple of minutes, they couldn't identify *Quebec Fox*. They had now crossed into North Vietnam, and Fuller called:

Radio: *Carbine, green em' up!*

This was the signal for Carbine flight to turn on the master arm switch, getting all weapons ready to fire.

Radio: *(Fuller) Carbine's picking up Fansong activity, one o'clock to my position, one and a half rings....I got a gun at twelve!*

Radio: *(Tomahawk Lead, F-105 bomber) Tomahawk, recheck em' green.*

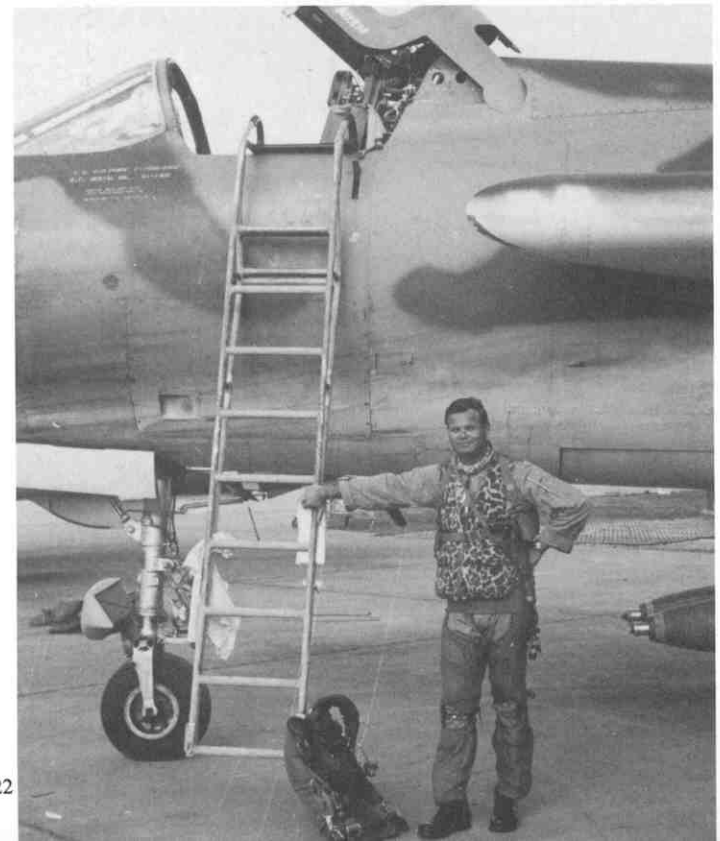
Radio: *This is Wooten, Wooten....read Quebec Golf Four, time 17.*
ICS: *(Fuller) I see he's getting a beeper too.* (referring to the still unidentified beeper that was interfering with communications.)

Radio: *Oakland, Thrush will be at your four o'clock high. OK babes, thank you. Oakland four has em' in sight, fairly close.*
ICS: *(Frith) Off to our right.*
(Fuller) Uh huh.
(Frith) I'd estimate our 2:30 to 3 o'clock position.

As the flights got closer to the target, the SAM calls increased, with many of the calls overlapping each other.

Radio: *SAM, one and a half rings, no threat.*
Green light.

(Below) Unlike present-day fighters, which have parachutes contained in the ejection seat, the Thud required its driver to put his chute on prior to climbing that long ladder. (Ben Allen)



Oakland three has a bad Doppler.
Seven miles from the point.
ICS: *(Frith) You're going to shoot first, is that correct?*
(Fuller) That's correct.
(Frith watching the radar and RHAW gear, and interpreting position and SAM threats) *Four miles from the point now...one and half rings....no threat....Fansong....off to our right...he's at one o'clock...one and a half rings...two ring now....no threat.... and, here's another one....he's at twelve o'clock....one at twelve, one at one.*

Radio: *(Tomahawk Lead) Tomahawk, we've got one at one 'clock, one and a half rings.*

The force commander was now ready to begin the run into the target area, and he asked all F-105 flights to check in. There is nothing more impressive than the discipline displayed by twenty-four fighter pilots who are primed with adrenaline and ready to go into combat. As each lead called for check in their flight responded immediately:

Waco, check.
Two.
Three.
Four.

The entire strike force was checked in a matter of a few seconds.

Radio: *(Waco lead) Waco, let's go button thirteen.*
(Fuller) Carbine, channel one three.

After the check-in required by changing to another radio frequency, the business of the strike flight continued.

Radio: *(Fuller) Carbine's one ring, at twelve o'clock.*

The air is now filled with calls of radar warnings, SAM launch warnings, and then this call:

Radio: *Heads up!*
You see the SAM?
Negative contact.
We got us two SAMs at nine o'clock level.
ICS: *(Fuller) You hear that? Someone called nine o'clock level for SAMs!*
(Frith) Negative contact....OK, I've got a strong strobe at nine o'clock....very strong!

Radio: *(Carbine Three) There's a plane going down in flames behind us, Carbine.*

Though they didn't realize it at the time, this was Carbine Four, and within a minute, Carbine Three would also be going down in flames. But before that happened things began to heat up for the entire flight.

ICS: *(Frith) Fansong now, at twelve o'clock.*

Radio: *(Fuller) Got a little Fansong, Carbines. Twelve O'clock.*
ICS: *(Frith) He's still at twelve....still at twelve, one and half rings ...you're thirteen miles from launch* (of the Shrike missile) *You still have a Fansong at nine....and a very strong Fansong now at nine....main beam presentation.*

Radio: *(Fuller) OK Carbines, he's lookin' at us....twelve o'clock.*

Radio: *(Carbine Three) This is Carbine Three! I'm flamed out, I flamed out! Mayday, Mayday, Mayday!*

A pair of MiGs had been vectored onto the tail of Carbine flight, down low. Their tactic of sneaking up and shooting from behind worked perfectly. Carbine four was blasted out of the sky before he had a chance to say anything, and Carbine three was hit within a minute of his wingman.

(Carbine Lead) Where is he?
(Carbine Two) Nine o'clock, slightly low.
(Carbine Lead) OK, take it around to the right.

ICS: *(Frith) He's out of control....get out! get out!*

Radio: *I got two chutes!*
OK, who in Waco has em' in sight?
(Fuller) OK Carbine Lead has the two chutes in sight, at about 6500 feet.
(Broughton) This is Waco, we've got two guys down, and we've still got a pretty good chance at getting them out....we're far enough back, and we're calling the strike mission off.

ICS: *(Frith) Report their position as 2103-10517* (Referring to the map coordinates).

Fuller repeated the coordinates over the radio for the strike flight to copy. The entire flight had now become dedicated to the rescue and recovery of Carbine Three. Guard channel was filled with the sound of Thorsness' and Johnson's beepers, as well as the calls of various members of the flight who had them in sight and were following them down, trying to pinpoint their position before they hit the ground. Fuller called for a frequency change to contact the Rescue force commander.

Radio: *(Fuller) Carbine, let's go channel one four, channel fourteen.*
(Fuller) Hello, Crown, hello Crown, this is Carbine.
(Rescue) Carbine, this is Crown
(Fuller) Roger Crown, Carbine one. Carbine three was hit and ejected, both chutes were sighted, they have not touched down yet, they're at about 2,000 feet. Are you ready for coordinates?
(Crown) Carbine One, go ahead.
(Fuller) Roger. 2118-10458....do you copy?
(Crown) Roger, we copy 2118-10458....you say you have them in sight?
(Fuller) Roger, they're going down in a valley, and as best I can tell, they might be able to slip to a ridge on the west side. We are in the area now.

Much of the tape now becomes unintelligible, as the beepers override transmissions of the more distant aircraft.

Radio: *Your beepers still on! Your beepers still on!*
(Carbine Three) Roger, I'll turn if off. Do you guys have me!
(Carbine One) Roger, roger, we got you in sight, Leo.
(Carbine Three) ....me?
(Carbine One) Roger, Carbine three, you're intermittent. We do hear you, and we do see both chutes.
(Carbine Three) I'm down, and I'm OK.
Carbine One) Roger, roger, understand you're OK....get up the ridge some.

Fuller had noted that the North Vietnamese were shooting at Thorsness' position from the next ridge over. Since he had been able to contact Crown before Thorsness or Johnson were even on the ground, he felt that the rescue forces were already on the way, and that they had a good chance to get them out. He was having trouble contacting Crown again because his transmissions were being overridden by the beeper....a beeper they felt was in their flight.

Radio: *(Fuller) Waco, this is Carbine.*
(Broughton) Roger, Carbine, go ahead.
(Fuller) Roger, we did contact Leo, and he is on the ground and OK. I think we better get out of here with this beeper....it's really screwing things up.
(Broughton) Roger Carbine, get that lousy beeper out of here!
(Fuller) Roger, will do, and the latest coordinates I had were 2518-10500.
(Fuller) Carbine flight....check.
(Ritter) Carbine Two.
(Fuller) Carbine four, are you on?
(Fuller) Carbine four, Carbine one.
(Fuller) Carbine four, come up channel one four.
(Broughton) Carbine one, you do any good with Crown?
(Fuller) I'm gonna try them again right now, and if I get them I'll relay for you outbound.

As on-site commander, Broughton had stacked his flights up over the downed crew. He was staying low in order to shoot any NVA that got too close to Leo's position, and being low, he could not talk directly to the rescue force commander who was orbiting over Laos in a C-121. Fuller, in the meantime, still didn't know where his number four man was, and was beginning to be concerned. He was finally able to raise Crown and update Major Thorsness' coordinates, and notify Crown that he had talked to Leo and that Leo was OK.

Radio: *(Crown) Roger, how long can you stay in the area?*
(Fuller) One of the remaining members of Carbine flight has a beeper activated in the aircraft, and we are departing so that we don't interfere in the rescue.
(Crown) Roger....is there anyone else in there with a tallyho on them?
(Fuller) Roger, the whole force is in there! Waco, the force commander has taken charge and if you can give me any estimates, I will pass them on to him.

(Above) F-105D-31-RE (62-4338) flown by Col Jack Broughton, Vice Commander of the 355th TFW at Takhli during 1966-67. (LCDR CL Valentine)

(Below) F-105s sometimes carried a camera pod on one outboard station (with an ECM pod on the other side) to record bombing runs, coming and going. Korat RTAB, 1 September 1968. (USAF by Sgt John M Lucas)

(Crown) OK....and it will be about forty minutes before we can have anybody there, and if he can come up this frequency, I'd appreciate it.
(Fuller) OK, he'll probably have to put somebody higher to relay....stand by, I'll be right back.

Fuller, after changing back to strike frequency, relayed his conversation with Crown to Broughton, who urged Fuller to get them to send the tankers as far north as possible, since he intended to rotate his flights in and out until the pickup was made. Broughton instructed Tomahawk to go high and establish contact with Crown. With the link between rescap and rescue command established, Carbine flight proceeded outbound, heading for a tanker and wondering what had happened to their number four.

(Above) Major Ben Fuller climbs aboard his F-105F for a Wild Weasel mission. (Norm Frith)

(Below) Captain Norm Frith, Fullers 'Bear'. (via Norm Frith)

ICS: *(Frith) Are you still getting a beeper?*
(Fuller) Nope.
(Frith) Must have been four then.

Radio: *(Ritter) Carbine one, two.*
(Fuller) Go ahead.
(Ritter) Rog', I think our number four man got hit just prior to Leo getting hit.
(Fuller) You do?!?
(Ritter) Rog', I looked back and saw two balls of flame, like a split airplane or a pair of drop tanks on fire...and that was before Leo got hit.
(Fuller) OK, I'll notify Crown.
ICS: *(Fuller) #@$%&%$.*
*Frith) **&%$#%$.*

Radio: *(Fuller) Crown, Carbine One. I cannot locate my number four man. He was on the wing of number three and its a possibility that he's down in the same area.*
(Crown) Roger, understand Carbine three and four are down. Can you give coordinates on number four?
(Fuller) The best we can do is within ten miles of three...probably ten miles west of three.
(Crown) Roger, and can you tank and go back in?
(Fuller) Roger, as long as none of our beepers are activated, and they don't seem to be.
(Crown) Roger, and will you contact Brigham for a tanker and call us on this frequency when you come back in.

Fuller rogered that, switched his flight to 259.8, and began calling the airborne controller to get a DF steer to the nearest tanker. After several calls to Brigham (the airborne controller) went unanswered, Fuller tried "Green Anchor 40", one of the tankers. Still no answer, so Frith suggested they try 294.3. No answer, and back to 259.8. There was still no answer, but they heard Waco asking Carbine Three to turn off his beeper.

ICS: *(Frith) That beeper probably is Carbine Four.*
(Fuller) Carbine Four is on the ground.
(Frith) But Waco doesn't know that....you better tell him.

But then the radio came alive with calls from Brigham to Green Anchor 40 and 41. Brigham was trying to raise the tankers, who could hear him, but whose return transmissions were apparently not getting through to Brigham. Fuller kept trying to get through to either of them during the lulls, and finally thought he heard Green Anchor 41 acknowledge.

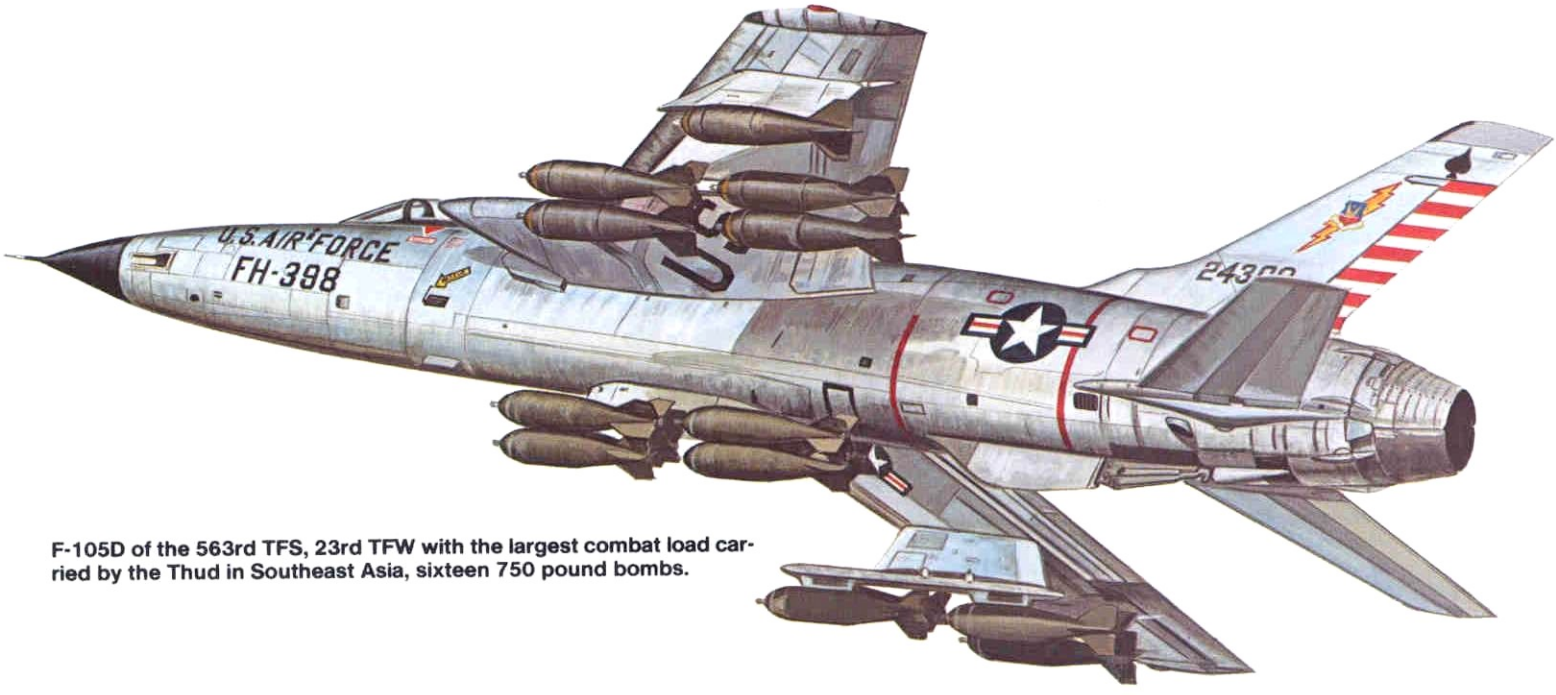
Radio: *(Fuller) Roger, 41, Carbine Lead and Two are coming back out for some gas so we can go back in on a rescap. We lost two people, and I'd like to get a rendezvous ASAP!*
(Green Anchor 40) Carbine, do you read 40?
(Fuller) Roger, we do.
(Green Anchor 40) Uh, roger, understand you guys desire fuel ASAP.
(Fuller) That's right, I'm four miles south of 97, (a navigational aid) *and Crown wants me to top off and come back in. We have two men, and possibly three down.*
(Green Anchor) Roger, we are 54 south of 97 at this time.

That transmission was interrupted by another, anonymous voice, which came up with; *Roger, hear you loud and clear. We should have some Sandies up in about twenty-five minutes, and the whole force is covering you. Another transmission urged Leo to climb the hill. Then Brigham began calling the tankers. In between transmissions, Fuller and the tanker pilot set up a rendezvous, with the tanker heading north to join up. Fuller advised the tanker pilot that Brigham might be trying to get in touch with him to move all the tankers further north, since they had the whole strike force in as Rescap. Some of the frustration began to show through in the next transmissions.*

ICS: *(Frith) Wonder what hit them?*
(Fuller) I don't know, someone called SAMS, but he never did give his call sign.
(Fuller) Damn! Two #@$% airplanes?
Radio: *(Fuller) Uh, four zero, Carbine.*
Fuller) Brigham, Brigham, Carbine.
ICS: *(Fuller) I'm tellin' you....I just can't believe this!*

Radio: *(Waco) One of you is one one side of the hill, and the other is on the other side....and, watch out, there is someone walking out on the road.*
(Crown) Waco lead, we have a possibility that Carbine Four is down too. Would you see if you can get any information from him of that?
(Fuller) Hello four zero, Carbine.
ICS: *(Fuller) Yoooo Hoooo.*
(Fuller) Damn them!!

Radio: *(tanker) Carbine, Green Anchor Four Zero.*
(Fuller) Roger, what's you DME from 97, and heading?
(Tanker) 220 at 49 miles, heading 040
(Fuller) Roger, I'm heading 230 at 33 miles. We must be getting pretty close. I'll transmit....you try to get a steer and we'll see if we can get together. (Tanker) OK, we're in a left turn now, to a heading of 220, and we should be right in front of you.
(Fuller) What's your altitude?
(tanker) 270.
(Fuller) Roger, gotcha....and you can push it up to refueling now.



F-105D of the 563rd TFS, 23rd TFW with the largest combat load carried by the Thud in Southeast Asia, sixteen 750 pound bombs.

F-105 of the 563rd TFS during their TDY tour in Southeast Asia during 1964.

Thuds refueling while enroute to targets in North Vietnam during early 1965.

Armament ground crewmen replace safety pins in pylons post-mission before Thuds taxi back to their revetments. The pilot keeps his hands out of the cockpit to reassure the armorers that he won't accidentaly hit the trigger or pickle prior to the pins being inserted.

(The refueling speed envelope between the KC-135 and F-105 was a relatively narrow one. The tankers had a hard time going fast enough to give the fighters a speed margin for controllability when the fighters got heavy with gas and/or bombs.)

While they approached the tanker, Fuller told the tanker pilot that Brigham was probably trying to get them to move north of the normal post-strike refueling point, since Waco was basing his bingo fuel on that assumption. The tanker crew rogered, and said they would move move it north. As if on cue, Waco came on the air with instructions for Leo: *Just stay put and stay hidden, we'll get someone in here to get you out.*

Radio: *(Fuller) You might have to drop down some....we've got a full load of everything and it's going to be tough hanging on.* (None of their ordnance had been expended, and they were requesting a lower altitude for the tanker.)
(Tanker) Roger, if you need a toboggan, let us know. The tankers had to be going downhill to get the speed needed to keep the fighters on the boom.)
(Fuller) Carbine, let's go 232.3
(Fuller) Carbine One.
(Ritter) Two.
(Fuller) Four zero, Carbine.
(Tanker) Roger.
(Fuller) I'm about to drop off here....maybe you could tighten up that hydraulic pressure on the boom.
(Tanker) Roger, you want to toboggan?
(Fuller) Yeah, probably give me a little bit here....you've got all I got now, and I'm just hanging on.

ICS: *(Fuller) Eaahuugh* (grunting with effort) *that's a nice toboggan.*
(Frith) Now we're getting a little airspeed out of it
(Fuller) Yeah, I'm still full military.

Radio: *(tanker) Carbine, how much fuel is it going to take to fill you?*
(Fuller) It's going to take about 4,000 pounds more to fill me up.
(Tanker) Roger.

Then another airborne controller, this one watching for MiGs, came on the Guard frequency with: *This is Hourglass. Annie Rooney, off of gulf three, time four three.*

ICS: *(Fuller) Shit, that's all we need....more MiGs in there!*

Radio: *(Crown) Carbine, do you have coordinates on Carbine Four?*
(Fuller) No, I didn't even know he was down. I saw Three get hit and eject, so we knew he was down, and I can't get Four to answer my calls, so we assume he was hit and is down too.
(Crown) Rog', understand.
(Fuller) It would be pretty close....within ten miles of those coordinates we gave you for Three.
(Crown) Rog'.

ICS: *(Frith) You got a minute you can listen to me talk?*
(Fuller) Yeah.
(Frith) OK, when we were turning and going down to the south, we were getting a steady launch light, and then when we turned back to the west, it would go out....so I feel sure it was over there by Hoa Binh.
(Fuller) Damn! I'm falling out of the sky here!
(Frith) And I also saw some automatic weapons fire. Did you see that?
(Fuller) No, I didn't....hey, how about taking the stick....hold it right here in this bank....while I look at the map."
(Frith) I got it.
(Fuller) And don't let the airspeed get any lower.
(Frith) Well, I'll try not to....damn! Airspeed I ain't got!
(Fuller) OK, looking at this map, right over Leo himself, we are out of range of everything....not by much, but we are.
(Frith) And Harry is west of him.

Radio: *This is Motel Wheaton, Alpha Fox four, time five eight.*
ICS: *(Frith) I wish I knew what happened to Four.*
(Fuller) I do too....I thought we lost him in a channel change.

While this was going on, Carbine Two had gone in and refueled. When he topped off, Carbine advised the tanker that they were going back in. He replied: *Roger, and good luck. We'll be waiting for you guys when you come out.*

Radio: *(Fuller) Carbine Two, let's go channel fourteen.*
(Ritter) Roger.
(Fuller) Carbine One.
(Ritter) Two.
(Fuller) Crown, Carbine.
(Crown) Go, Carbine.
(Fuller) Roger, Carbine One and Two have gas and we're proceeding 040 57 southwest of ninety seven.
(Crown) Roger, will you hold high and dry? We have other aircraft in the area, and we'll use you when they come out.
(Fuller) Roger, we'll hold about 20 miles north of ninety seven.

As they held short of the rescap area, Carbine flight could hear the rest of the covering flights discussing positioning, then this, from the rescue forces: *Crown six, this is Crown Two Uniform. We've got all the forces in position up here, and we are waiting for clearance to go in....can you see what you can do about expediting that?* That was the first indication that there was a glitch in the system. Somewhere, someplace along the line, someone had failed to pass the word, and three pilots were getting closer to becoming inmates at the Hanoi Hilton.

ICS: *(Fuller) Clearance for what? What the hell....who has to get clearance?*

Radio: *(Crown) Sandy One, Crown One on Two.*
(Crown) Carbine, Crown.
(Fuller) Go ahead, Crown.
(Crown) Roger, will you attempt to contact Sandy One on this frequency?....and I want you to escort Sandy One and Two into the area, over.
(Fuller) Roger, Sandy One and Two, Carbine One and Two.
(Sandy One) Carbine One, Sandy One....go.
(Fuller) Roger, Crown One wants me to escort you into the area. What's your position?
(Sandy One) Zero five five for forty four.

As they headed for the Sandys, who were a flight of A-1 Skyraiders which would fly close support over the downed pilots, then go out and escort the helicopters back in, there was more chatter on all frequencies. The force was shuttling out for gas and passing top and low cover to other flights.

(Crown) Carbine, Crown.
(Fuller) Go ahead Crown.
(Crown) What's your bingo time?
(Fuller) Forty to forty five minutes, Crown.
(Crown) Rog', copy, thank you.
(Fuller) Green em up for bombs and guns, Carbine.
(Crown) Carbine, Crown, did you copy that MiG call?
(Fuller) Uh, it was broken. Understand they're about thirty five miles away, is that right?
(Crown) That's about it now, Oakland flights going after them now.

Crown had picked up a flight of four aircraft approaching the area at 30,000 feet, and after checking to make sure that there were no F-4s in the area, they identified them as Migs. There was a lot of additional communication between Crown and the various rescap flights, then:

(Fuller) Crown, Carbine One. We are about forty miles out from the area, and still haven't picked up Sandy One.
(Crown) Roger, why don't you just go on into the area and cap the Sandies when they get there?
(Sandy One) This is Sandy One, we are about sixty-two miles out.
(Fuller) Roger Sandy One, and what altitude you going to be working?
(Sandy One) Base plus two.

ICS: *(Fuller) Whatever that is.*
(Frith) Do we have a base altitude?
(Fuller) They didn't give us one today.

While they headed for the cap area, trying to get in touch with the Sandies, Carbine Flight was being watched by the North Vietnamese radars, and Frith was busy making calls, including one valid launch light. However, no SAM was spotted, and they continued toward the rescap area. Carbine flight eventually got together with the Sandies, and began working their way into the area. Tomahawk flight was still in the area, and had enough gas to stay long enough to point out the position of the downed pilots to the Sandies. The helicopters had still not started into North Vietnam, and now nightfall was becoming a factor. As they got into the area, Carbine Four's beeper again

screeched across all transmissions, making coordination difficult.

Radio: *(Tomahawk) Sandy One, Tomahawk One. We are orbiting over the area, and I will show you exactly where they are. I have continuous parachute beeper and personal beeper.*
(Sandy) I got a DF on a beeper to the north of where we are orbiting Tomahawk.
(Fuller) OK Sandy One, I'm back at your six o'clock, and if you'll turn left....
(Fuller) OK Tomahawk, this is Carbine, I've got you in sight and the Sandies are off at your 2 o'clock.
(Tomahawk) This is Tomahawk One, rock'in wings, rock'in wings. Do you see me, Sandy?
(Tomahawk) This is Tomahawk One, I'm inside your circle, rockin' my wings....do you you see me?
(Tomahawk) Sandy One, Tomahawk....head east, head east!
(Tomahawk) Sandy One, did you read?
(Fuller) OK Sandies, you're right behind me now, and you are pretty much in the area....but I don't have the chutes now.
(Sandy Two) Sandy One, Sandy two. They want us to go east.

The Sandies continued flying in the area, without spotting the chutes. Tomahawk One flew over the spot, rocking his wings to show Carbine and the Sandies just where Leo was. During all of this, Sandy Two called Sandy One to ask if the chopper should be sent in. There was obviously still some confusion in the communications loop. Through all of the chatter and the insistent beeper on the channel came: *Does anyone read Carbine Three's Bear?* Johnson was trying to establish contact with the rescue forces, who were so close, and yet so far away. Leo was also trying to reach the Sandies, who evidently could not hear him. Fuller called the Sandies, telling them: *Sandies, Carbine Three is trying to reach you on guard. If you'll answer him, he'd appreciate it.*. But Sandy One had lost his radio, and no one was going to talk to him the rest of the day.

During this time, the North Vietnamese had launched MiG-21s. They were tracked by the airborne controllers, and spotted over Channel 97 by another flight, and it was probably one of these that shot down Tomahawk Four, adding yet another beeper to the din on guard frequency.

Radio: *(Cleveland) Crown, Crown, Cleveland One.*
(Crown) Go ahead, Cleveland.
(Cleveland) Did you get that....there are MiG-21s in the area, and we think one of them shot down Tomahawk Four.
(Fuller) Sandy, Carbine. Do you see the smoke up the valley? Is that yours, or theirs?
(Fuller) Tomahawk, Carbine. Could you pass to Crown that we are only going to be able to stay here another ten minutes?
(Tomahawk) Rog'
(Crown) Roger Carbine, and we got to clear those MiGs out before we can bring our choppers in there.
(Fuller) There's no Migs over the target area....that's between us and home.
(Crown) Would you ask Sandy One to let us know when he wants the choppers in? They are holding about ten miles....or ten minutes out.
(Fuller) Sandy One, Carbine.
(Fuller) Sandy One, Carbine on guard. Will you give the Jollys a call when you want them in....they are holding about ten miles out.
(Fuller) Sandy One, Carbine One, do you read?

Fuller repeatedly called for Sandy One to acknowledge....to no avail. Finally he called for a fuel check from Carbine Two, who reported about 6800 pounds....good for one more circuit.

(Fuller) Crown, Carbine. We got enough fuel for one more 360....
(Crown) OK, I got Waco inbound but it'll be few minutes before he can get there.
(Fuller) OK, and I never did get an acknowledgement from Sandy One on the call for the Jollys.

And they never did get an acknowledgement from the Sandies. As it turned out, one of the helicopters had a hydraulic failure and had to RTB. Their rule was never to go into North Vietnam singly, so the rescue effort was called off for that day. But before that happened, and as Carbine One and Two were rolling out and heading for home, they received one last transmission from Carbine Three *Get me out of here! Get me out of here!* Unfortunately, Leo, Harry, Bud Abbott, and Tomahawk Four, Joe Abbott would have to wait until 1973 to get out of North Vietnam. When the remaining two airplanes from Carbine flight landed back at Takhli, they had been airborne for four hours and fifteen minutes.

(Above) Captains Jerry Hoblit and Tom Wilson are greeted by 355th TFW Commander Colonel Bob Scott upon return from their hundredth mission. The red carpet contains names of previous hundred mission pilots. (Norm Frith)

(Below) Hoblit and Wilson prepare to get into the serious celebrating that accompanied the completion of mission number one hundred. (Norm Frith)

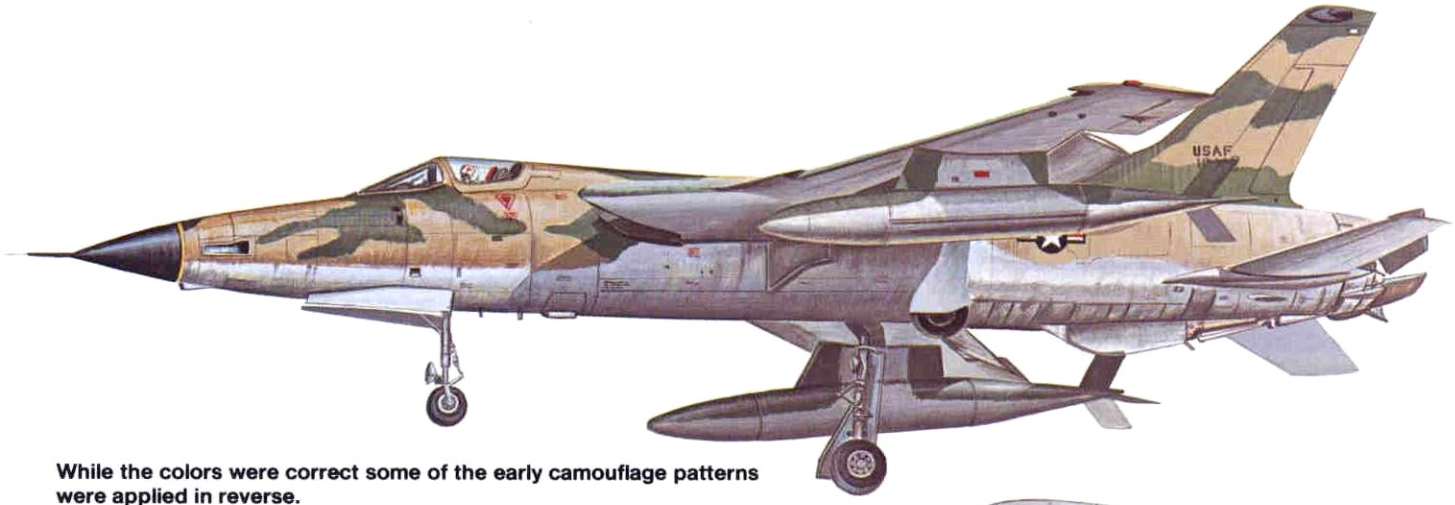
(Below) Ben Fuller and Norm Frith celebrate their 100th. (via Norm Frith)

Patches of some of the Thud units that carried the air war to North Vietnam during Rolling Thunder....and later. The hundred mission patch was awarded at that milestone, and the River Rat patch was usually worn on 'party suits' ....custom-tailored flight suits which became the uniform of the day for the Southeast Asia Tactics Conferences that spawned the Red River Valley Fighter Pilots Association.

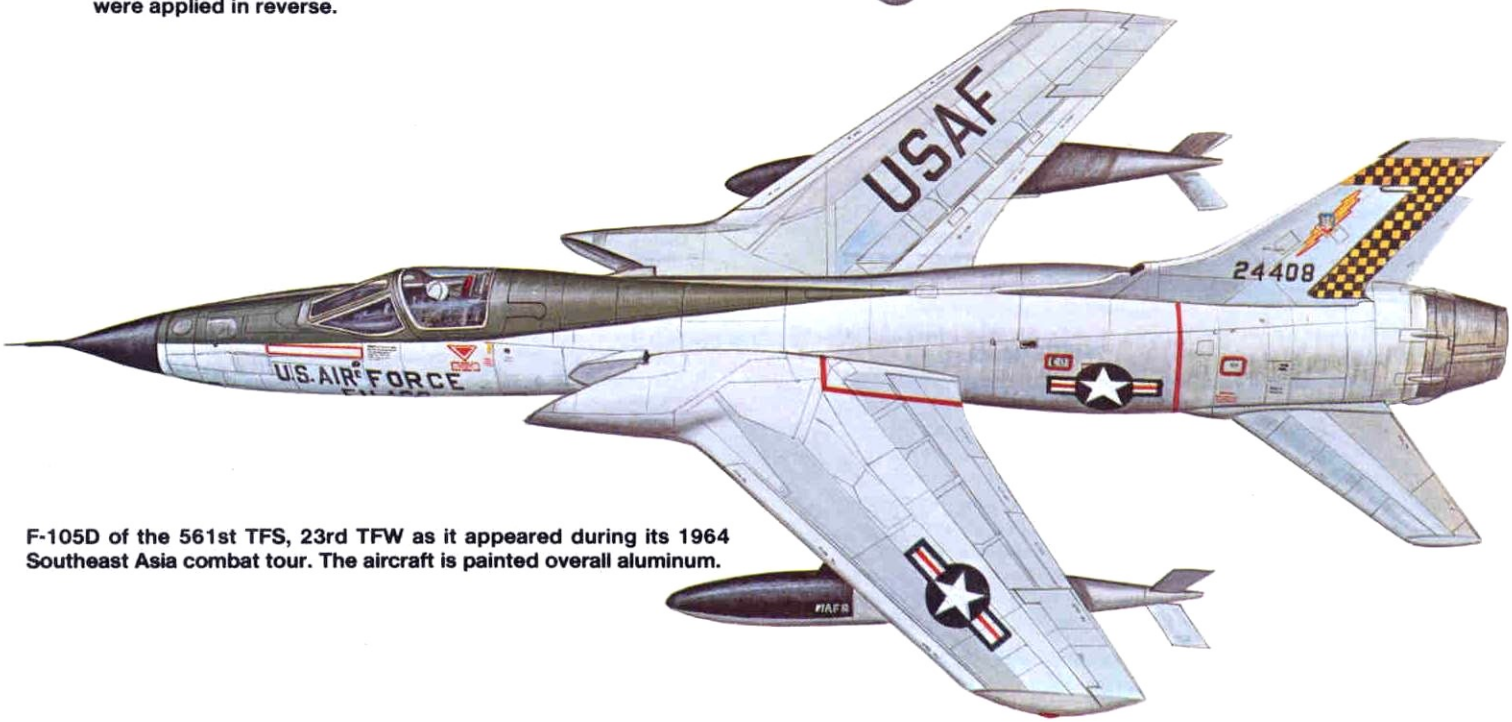
(Above) The 'Frito Bandito' of the 357th TFS, 355th TFW.

(Above) F-105D of the 354th TFS at McClellan AFB in 1969 after its return from Southeast Asia. (Peter B Lewis)

(Right) F-105Ds of the 333rd TFS, 355th TFW loaded with 500 pound bombs, about to refuel over Laos enroute to targets in North Vietnam. (Jerry Arruda via Norman E Taylor)



While the colors were correct some of the early camouflage patterns were applied in reverse.



F-105D of the 561st TFS, 23rd TFW as it appeared during its 1964 Southeast Asia combat tour. The aircraft is painted overall aluminum.

F-105D of the 8th TFW during its 1964 deployment to Thailand. (Dave Everson)

The pilot of 'MR BLACKBIRD' has extended his refuelling probe to the photographer. This salute was rendered in lieu of the more recognizable raised middle digit. (Brigadier General Don Kutyna)

THE DOUMER BRIDGE BLUES

They got a little place just south of the Ridge
Name of the place is the Doumer Bridge
You take the MiGs/I'll take the flak
Come on, I'm gonna show you where it's at.

(from the song by Captain Robert Middleton)

Lt Colonel John Piowaty flew a hundred mission tour in the Thud with the 355th TFW in 1967. I asked him to recollect his most memorable mission, and what it was like to fly the Thud in combat. His narrative follows:

The Thud was the best airplane for the job at that time. It would take tremendous battle damage and bring its pilots home, and it was a very stable bombing platform. But its most impressive characteristic was its ability to go fast over long distances. As an example, we might drop off the tanker at Brown Anchor, which was about twenty miles north of Danang, while our escort of F-4s were dropping off Tan Anchor twenty miles further north, then head for targets along the Northeast Railroad. The F-4s would be loaded with nothing but missiles and fly 7,000 or 8,000 feet higher. They would punch off their wing tanks when they ran dry (we always carried ours in and out, unless jumped by MiGs). We would be carrying a load of ECM Pod and Sidewinder on the outboard pylons, wing tanks on the inboard pylons, and six 750 pound bombs on the centerline. Those seven-fifties were high drag bombs....World War II vintage, and not made to go 440 knots of indicated airspeed at 12,000 feet. Very often, we would run the F-4s out of gas before we hit our targets. They could not keep up with us, even though they started out ahead of us, with lighter loads, and punched off the extra drag of wing tanks. We could go so fast....could cruise so fast....a sixteen ship gaggle would hit 440 knots indicated at 12,000 feet, then about a minute from the target, lead would call "push it up", and we would start accelerating and climbing! And, unless you were ham-fisted or had a dog of an airplane, you wouldn't even have to tap burner! Other airplanes just don't do that! Our exit speed was planned at 600 knots, and I am sure that the North Vietnamese second-level gunners would brief their novices by saying: "Alright now, these airplanes all fly at either eight, nine, or ten miles per minute." They were dumb, and that's the only way they could figure out their maps, but said that way, the Thud's speed is all the more impressive. We could burn 6,000 pounds per hour at 600 knots, and even the new fighters don't do that well. It was very, very stable in formation. We flew in some pretty rough weather. There were times when we would have a twenty ship gaggle with flights of four in trail, and be on solid instruments for twenty or thirty minutes at a time punching through monsoon clouds. The Thud was a comfortable, comfortable airplane....it fit well, and had some really well done details. For example, all the switches felt different, so your fingers didn't get confused when you were reaching for something while looking outside the cockpit. The airplane was really built solidly....there was nothing delicate about it....even the cockpit. I mean, you felt like you could just step in there on anything, and it would take it. Yet, it was comfortable to sit in, and it flew honest and true. I could make adjustments of a quarter of an inch on a refueling boom, while taking on gas from a KC-135....that's how stable and true the Thud flew!

My most memorable mission was my 55th. That was 11 August 1967, and we were going against the Paul Doumer Bridge in Hanoi. I was in Ops at ten o'clock that morning, as one of the pilots planning the mission for the afternoon. The strike board, which listed our primary and alternate targets, was made of clear plexiglass, and the targets were listed in grease pencil. We had just gotten the charts out to plan the mission when one of the Intel sergeants came out and lined out the primary, replacing it with a number, which because of a colon, we immediately recognized as one of the JCS targets. We didn't have to speculate long on what it was, since he penciled in "Paul Doumer RR/Hwy Bridge".

There were some immediate changes in the force structure, with Colonel Bob White ending up as overall force commander. They slipped the takeoff one hour to give the ground crews a chance to change the ordnance loads of the airplanes. I have to give the guys on the ground credit. With a one hour slip, they down-loaded the six 750 pound bombs on the centerline MER. They down-loaded the two 450 gallon wing tanks, and this is all the more remarkable, because they had to remove the wing pylons, since the fuel tank wiring was not compatible with bombs. They up-loaded new pylons on the wings, up-loaded two 3,000 pound bombs on the wings, and up-loaded a 600 gallon belly tank and fueled it. All this with only a one hour slip! Now, they didn't follow the rules. They downloaded six seven-fifties all at once....with the MER and everything! In order to do this, they had to put three or four guys on the back end of the MJ-1 bomb loader to keep it from tipping over from the weight of all those bombs. Same with the fuel tanks....a violation of all the safety rules to down-load full tanks, but they did it without spilling a drop of JP-4. Every airplane started on time, all airplanes scheduled to taxi did taxi, all the airplanes, including the two airborne spares, took off on time. Every airplane got to the target, and every airplane except mine landed back at Takhli.

I had an aerial photo of the Doumer Bridge, with the surrounding areas of Hanoi, which was taken from about the same position we would begin our run on the target. After we were briefed, I got that photo out

(Below) Captain John Piowaty in his (euphemistically stated) 'Steely-Eyed Defender of Democracy' pose. (via John Piowaty)

(Below) Bear flight of the 354th TFS. Left to right: Bob Lindsay (Bear 3), Nelson MacDonald (Bear 1), Col Bob White (Kingfish 1), Mal Winter (Bear 2), and John Piowaty (Bear 4). (via John Piowaty)

(Above) The aerial photograph carried by John Piowaty on the 11 August 1967 mission against the Doumer Bridge. (USAF via John Piowaty)

and held it, turning it and rotating it, then pulling it closer to my eyes, to get an idea of what the target picture was going to be as I rolled in on the bridge, then started down the chute. On the way out to the airplanes, I folded the photo so it would fit over the face of the radar scope so I could look at it often on the way into the target. The wind that day was 080 degrees at eight knots, and I had computed my aim point at sixty feet from the span I was briefed to hit. When you are after a target as big as a bridge it's not easy to make yourself aim at a patch of muddy water sixty feet from the bridge, but I knew that's where I would have to aim, so I drew an arrow on the photo showing the direction of flight at drop, with the point of the arrow on the aim point. I was determined that I was going to hit that bridge!

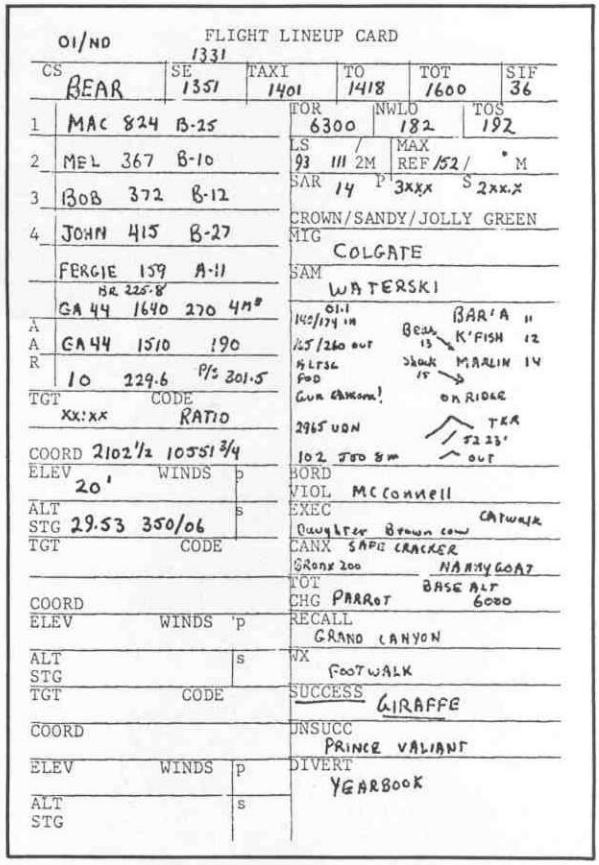
I was number four in 'Bear Flight', which was the first group of four bombers to hit the bridge. Colonel White, in "Shark Flight" was first into the target area, and had his flight loaded for flak and SAM suppression with CBUs. He was about thirty seconds ahead of us, so that his bombs would be going off on the ground when we got to the target area.

On the way in, we flew right by Phuc Yen airfield, which was still off limits to us at that time. I watched two MiG-17s take off in formation and race after Colonel White. It really angered me that we could not go after these MiGs while they were on the ground, when they would have been easy to knock off without even slowing down the mission against the bridge.

As we approached the target, the flak and SAMs started coming up, and it was really heavy! We overshot just a little, so that as I rolled in I was forced to adjust back from left to right. I started down the chute, put the pipper on the aim point, and pickled off my bombs. Mo Baker and Tom Kirk, who were behind me, said that it was one of my bombs which knocked down the one span we took down that day. The two 3,000 pounders each airplane was carrying were World War II types, whose ballistics were not all that great. They only sat about thirty feet apart on the airplane, but if they didn't come off the pylons at exactly the same time, the airplane would yaw a little, causing a wide dispersion at impact. My 'other' bomb hit about 150 feet from the bridge.

I pulled off kind of easy because I didn't like those seven G pullouts, since it covered the windscreen in Gray. (Authors note: Contrary to what you might think, this does not refer to the grayout that you might expect to experience as a result of blood being forced into your lower extremities by G forces.) *In the high humidity of Southeast Asia, anytime you pulled more than four or five Gs you would create condensation all over the airplane. In the Thud, high G at low level was like flying into a cloud. Besides making it tough to see out of the cockpit, the condensation just made the airplane that much easier for enemy gunners to spot and track, so I liked to limit my pullouts to four or five Gs. I figured I might come out 500, 600, or even 700 feet lower, but I would have fifty knots more airspeed to use in my escape. Early in my tour, I'm sure I was using the same seven Gs that a lot of others were using, but after a few missions the adrenal flow got regulated and I started to ease up on the pull.*

On the pull-off, I swung kind of wide. I wasn't in a big hurry to head



01/ND FLIGHT LINEUP CARD

1331

CS	SE	TAXI	TO	TOT	SIF
BEAR	1351	1401	1418	1600	36

1 MAC 824 B-25
2 MEL 367 B-10
3 BOB 372 B-12
4 JOHN 415 B-27
FERGIE 159 A-11
BR 225.8
GA 44 1640 270 4M*
A A R GA 44 1510 190
10 229.6 P/S 301.5

TGT CODE
XX:XX RATIO

COORD 2102 1/2 10551 3/4
ELEV 20' WINDS b
ALT s
STG 29.53 350/06
TGT CODE

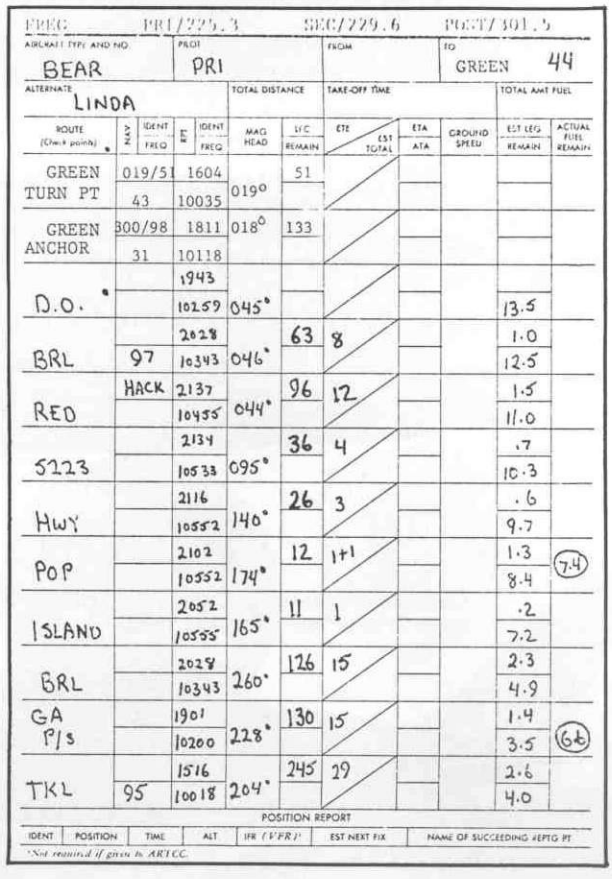
COORD
ELEV WINDS p
ALT s
STG
TGT CODE

COORD
ELEV WINDS p
ALT s
STG

TOR 6300 NWLO 182 TOS 192
LS / 93 111 2M MAX REF 152 / M
SAR 14 P 3XXX S 2XX.X
CROWN/SANDY/JOLLY GREEN
MIG COLGATE
SAM WATERSKI
01.1
140/174 in
125/260 out
Bear 13
Shark 15
BAR'A 11
K'FISH 12
MARLIN 14
ON RIDGE
2965 UON
102 580 8m
TKR 5223' out
BORD
WIOL McConnell
EXEC Catwalk
Quigley Brown com
CANX SAFE CRACKER
Bronx 200
NANNY GOAT
TOT BASE ALT 6000
CHG PARROT
RECALL GRAND CANYON
WX FOOTWALK
SUCCESS GIRAFFE
UNSUCC PRINCE VALIANT
DIVERT YEARBOOK

(Above) Bear Flight Lineup Card for the Doumer Bridge Mission 11 August 1967.

(Below) Bear Flight Flight Plan card for the Doumer Bridge Mission, gives time, distance and heading information.



FREQ PRI/225.3 SEC/229.6 POCT/301.5

AIRCRAFT TYPE AND NO.	PILOT	FROM	TO	TOTAL AMT FUEL
BEAR	PRI		GREEN 44	

ALTERNATE LINDA TOTAL DISTANCE TAKE-OFF TIME

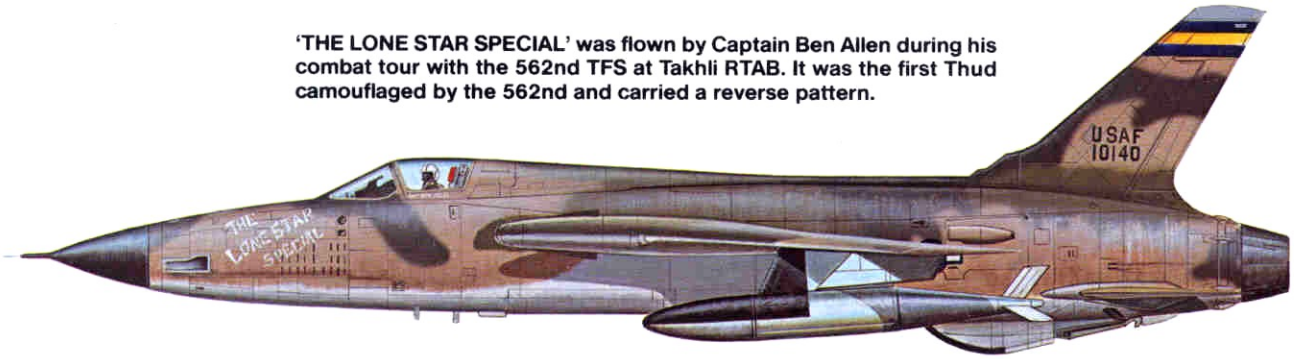
ROUTE (Check points)	NAV	IDENT FREQ	E	IDENT FREQ	MAG HEAD	LEG REMAIN	ETE	EST TOTAL	ETA ATA	GROUND SPEED	EST LEG REMAIN	ACTUAL FUEL REMAIN
GREEN		019/51		1604		51						
TURN PT		43		10035	019°							
GREEN		300/98		1811	018°	133						
ANCHOR		31		10118								
				1943								
D.O.				10259	045°						13.5	
				2028		63	8				1.0	
BRL		97		10343	046°						12.5	
		HACK		2137		96	12				1.5	
RED				10455	044°						11.0	
				2134		36	4				.7	
5223				10533	095°						10.3	
				2116		26	3				.6	
HWY				10552	140°						9.7	
				2102		12	1+1				1.3	(7.4)
POP				10552	174°						8.4	
				2052		11	1				.2	
ISLAND				10555	165°						7.2	
				2028		126	15				2.3	
BRL				10343	260°						4.9	
GA				1901		130	15				1.4	
P/S				10200	228°						3.5	(6.2)
				1516		245	29				2.6	
TKL		95		10018	204°						4.0	

POSITION REPORT

IDENT	POSITION	TIME	ALT	IFR (VFR)*	EST NEXT FIX	NAME OF SUCCEEDING REPTG PT

*Not required if given to ARTCC.

'THE LONE STAR SPECIAL' was flown by Captain Ben Allen during his combat tour with the 562nd TFS at Takhli RTAB. It was the first Thud camouflaged by the 562nd and carried a reverse pattern.



'Quantum Mechanic' was flown by Lt Dennis Weaver of the 44th TFS, 355th TFW at Takhli RTAB in 1970.

F-105F flown by Roman Darmer in the Wild Weasel mission for the 44th TFS during 1967. The 'Thud Driver' pin was presented to Darmer by his squadron commander upon completion of his hundredth mission.

'My Karma', an F-105D of the 466th TFS, 419th TFW at Hill AFB, Utah in 1983.

The Wild Weasel patch was worn by Weasel crews. The 'Cave Putorium' patch is the emblem of the Society of Wild Weasels. The 421st and 13th TFS were squadrons that flew the Thud in combat over North Vietnam.

'Crown Seven', an F-105F Wild Weasel was flown by Major John Revak and his Bear, Major Goldstein.

(Above) The Doumer Bridge after the mission, with one span having been dropped by John Piowaty. (USAF via John Piowaty)

(Above) The damage done to John Piowaty's Thud by an NVA 85MM. (John Piowaty)

downstream to the join-up point seven miles away. We had marked our maps with suspected POW camps, and one of those spots was close enough for me to take a look. I swung a little to the right, and went down to about 4,000 feet over the town. It was a way for me to say: "Hey guys, somebody's here....somebody cares." I had no idea how noisy we were, and how the guys in jail had no doubt at all that we were there and that we had hit that bridge. I wanted them to hear an afterburner.

I pulled hard left and headed downstream, indicating 630 knots at 6,000 feet as I looked for my flight. I was going to join on Colonel MacDonald and Mal Winter. Bob Lindsey, who was number two in the flight, somehow got swung off toward Channel 97 and headed directly out of the area while the rest of us went downstream to join up. All of a sudden, I started seeing things the size of wine bottles go by the cockpit at about a fifty knot overtake speed. I was now several miles from downtown Hanoi, and feeling very invincible. I remember thinking: "You guys can't hit me! I'm invincible! I'm invisible! I'm too far away, I'm going too fast....I'm out of range!" I was just starting to lay the airplane into a right turn to join on Colonel MacDonald....and suddenly I was looking at green rice paddies! The airplane had been hit in the tail, right above the horizontal stab, by an 85MM, which had kicked it over a good thirty degrees. Lights came on all over the airplane....fire lights....master caution ....I couldn't even begin to tell you all the lights that were lit by that hit! The tape instruments had gone completely erratic, and were just a blur.

Mal Winter yelled: "Four, you're hit!" I was in a right turn, joining on Colonel Mac's right wing, and when Mal saw me get hit and the fire streaming from my airplane, he moved over to left wing. Colonel Mac, who had not ordered a cross over and didn't know that Mal had moved, looked out at his right wing, saw me on fire and figured that I was number two. He yelled: "Two, you're hit!" I knew that I was hit, but I had no idea that Mal had been hit, and I really thought things had gone to hell in a hurry. As it turned out, there were only two guys hit that day, me and Bruce Lotzbiere, who was in a following flight. Bruce took a piece of shrapnel which expended its energy going through the windscreen and just laid on the glare shield all the way home.

I turned off the ATM (air turbine motor) because I knew I would be burning hydraulic fluid in the back end. That lost me the stability augmentation system, which didn't make a lot of difference in the Thud....except maybe on landing with an unnatural touchdown. I also lost the utility hydraulic systems and the tapes, but the airplane was still flying so I headed home without slowing down. Colonel MacDonald was later written up for a citation for this mission which, as I remember it, read: "After his flight had knocked down the Doumer Bridge, Colonel MacDonald slowed his airplane to an almost suicidally slow speed to render assistance to his wingman, whose airplane had been hit by AAA." What actually happened was this: I was really smoking for home, and Colonel MacDonald came up on the radio and said: "Dammit it all Bear Four, if you'd slow down, maybe we could catch up and give you some help!!"

Now that I think of it, it was probably not the smartest thing to do....roaring along at 630 knots indicated airspeed (750 knots true), in a damaged airplane that I might have to eject from at any minute. Ejections at those speeds almost always resulted in broken legs, the windblast would wrap your legs around the seat.

Since Udorn was a lot closer than Takhli, we made the decision to go there if the airplane would last. The Thud had a DC generator and an AC Inverter system, so I had a good TACAN and radios. I made a long, straight-in approach to Udorn, lowered the gear and flaps, let the airplane sort of thrash around and seek its own attitude, and brought it on in. Coming down final, I was keeping an eye on the standby airspeed indicator, which we called the 'peanut gauge' because of its size, and I was looking at 205 knots. I seemed to recall hearing that the peanut gauge was good for plus or minus thirty knots, and if it was minus, that could put me at 175 knots....which was falling out of the sky speed in the Thud. I called Colonel MacDonald; "Lead, how's my speed?" and he replied; "Looking good....looking good!", so I just kept it coming, but the airplane did settle in kind of hard over the end of the runway when I brought the throttle back. The hard settle could be attributed to the loss of stability augmentation, which really gave you a nice flare on landing. I popped the drag chute, and the next call I heard was from the rescue helicopter pilot, yelling; "No Chute! No Chute!" One of the risers had been cut by shrapnel, and when I released it, the chute just fell out on the runway, still packed.

Well, there I was, at 200 knots with no brakes. I reached up, grabbed the emergency brake handle, and slid my feet up on the rudder pedals. About that time, the right wheel dropped. I don't think I touched the brakes....may have....they're air brakes, 3,000 pounds of air over hydraulic, which is not easily modulated. I don't have big feet, but even my size nines don't modulate that kind of pressure well. I used all the rudder I had to keep it on the runway, but she started veering off, so then it was on the left brake. I had my tailhook down, but I never got the mid-field barrier. The right main gear door impacted the cable, which only cut into the door about an inch, I was going so slow by that time. That's how effective the emergency brake was. The arresting cable had caught the right main gear, but the left wheel rolled over it, slewing the airplane to the right so that the nose gear was just off the runway....and there it stopped.

I popped the canopy, unstrapped, stuck my head out of the cockpit and looked the airplane over....if it showed any signs of fire, I was going to jump, otherwise, I would wait for a ladder. While I was sitting there waiting for the emergency equipment to show up, the air pressure from the emergency brakes bled off, and the cable tension from the arresting gear pulled the right main gear back, even though the tire was completely gone and the naked wheel was resting on the runway. This castered the nose gear to the left, settling the airplane to the right. Here I was, sitting on the right canopy rail, and it felt like the landing gear on that side was collapsing! If I jumped, the airplane would fall on top of me, so I just held on, prepared to ride it all the way down. Fortunately, it held, but that was another thrill that I really didn't need at that point in the mission!

The emergency crew finally showed up, and put a ladder up so I could scramble down. I looked the airplane over, and it did have some impressive battle damage, but the thing I remember was a picture that was taken by the Air Force photographer. Someone had thrown me a towel

that had been soaked in ice water. I had that towel draped over my shoulder, and I thought I really looked like Joe Cool....the epitome of the right stuff. However, closer examination of the photo shows my knee board down around my ankle (I had forgotten to unstrap it) and....horror of horrors....the 'remove before flight' streamer from the safety pin for the ejection seat hanging out of my G-suit pocket! That is really a major no-no, and the really cool fighter pilot would always remember to pin his seat before scrambling out of his crashed airplane.

We went 'golden' at about mission number 90 or 95, depending upon the number of new people available to the wing. If there were enough new guys available, when you reached that plateau, you were not asked to fly into route package six. Well, I was sitting on mission 95, waiting for 96, and the weather had been bad in pack one, two, and five, and I wasn't getting to fly. Our Ops Officer came to me one day, and said; "John, do you want to go on the Alpha Frag tomorrow?" That was the primary strike north, rather than the left-overs to the lesser route packs. I said; "Yeah, sure....be glad to." In his opinion, it would be a "pretty good go....some good targets." Sure enough, the next day, it's the Doumer Bridge, and I'm going to lead the bombers. That was enough to get me motivated. We had been back to the bridge several times, and they had shot a lot of people down, and they always rebuilt the bridge....so I really wanted to get that bridge again.

I was in the 354th TFS, but the airplane I drew that day was from the 333rd, and I really didn't know the ground crew. One of my routines during pre-flight and start up was to talk to myself as I went through the checklist. That way, the crew chief always knew what I was doing, and could sort of keep up with the checks he had to do from the ground. Well, the check that day went something like this; "Ready to start?...Yes sir....Alright, crank it up....OK, twelve percent RPM, comin' around the horn....good light. OK Air turbine motor on....Chief, are you ready to check thrust to K?" (Which referred to the operation of the exhaust petals, which help to regulate thrust at various throttle settings.) "Yes sir....would you try that again, sir?....Once more?....OK, it's working now." Then we checked the fuel transfer to the wing tanks, and you can check that on the ground by listening for a thumping as the tanks are pressurized. He had me check that several times before he was satisfied, but now I was beginning to wonder about this airplane, so when it came time to check the gun purge, I only pretended to pull the circuit breaker. He gave me a thumbs up, and right then I decided to go get another airplane. He agreed with the decision, since the systems on this bird were obviously not up to speed.

Well, now I'm getting behind. My guys have already taxied as I jump out, get in the truck, and run down to the other end to another airplane. The 354th Maintenance Officer, Major Schmidt, was on hand, and he threw a ladder up on the other side of the airplane so that he and the crew chief could strap me in after a real quick pre-flight. I was like a surgeon getting gloved and gowned before an operation! They yanked the ladders, and the crew chief gave me the start sign. We didn't even bother with the intercom at this point, and at twelve percent, I came around the horn and got a good start. I signalled for them to pull the chocks, looked out....and saw my Wing Commander, Colonel John Girardeau, who had brought some Senator on a fact-finding mission out to the flight line. The Wing Commander, snapped off a smart salute to me....and I just about burst out of my flight suit with pride! I saluted back, gave him a thumbs up, and now the chocks are out, and the airplane is rolling at idle....and I don't even have the Air Turbine Motor on yet! I don't have any brakes....and I'm looking at another F-105 sitting a hundred feet in front of me....but finally the J-75 winds up to fifty-five percent and I get the ATM on, and hit the nose wheel steering to turn out onto the taxiway.

I took a shortcut to the active runway, taxiing at probably sixty knots, hit the arming area, where the guys were all over those pins, getting the pins and streamers pulled in record time. Canopy down, and call the tower:

"Takhli Tower, Wolf Lead, number one with one."
"Roger, Wolf, wind 261 at 6, cleared for takeoff."

And, as I swing around onto the active for takeoff, there is Colonel Girardeau, getting out of his staff car, and he again gives me a salute! I line up on the runway, push the throttle all the way up, glance down at the EPR (engine pressure ratio), and read 2.30. EPR required that day for takeoff was 2.38. I reach over, push the throttle forward with both hands, and it gets up to about 2.30 and a half. I was checking for thrust decay which is what was provided at idle as the burner petals opened to the burner position. (That was also a secondary check for AB operation.)

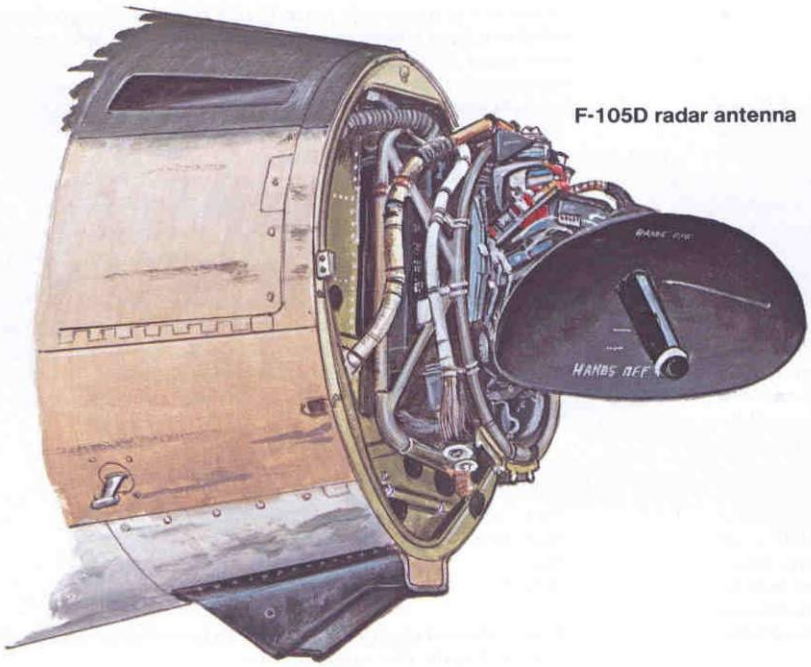
"Takhli Tower, say EPR."

(Above) Major Alonzo Ferguson, Colonel Larry Pickett, and Captain John Piowaty celebrate Ferguson and Piowaty's hundredth. Colonel Pickett later reorganized the River Rats in the United States, and is the current CINCRAT. Piowaty began cultivating his mustache when he arrived at Takhli. On completion of his hundredth, the 'stache' measured twelve and one quarter inches. (via John Piowaty)

(Below) Starboard main gear of Piowaty's Thud after his emergency landing at Udorn. (John Piowaty)

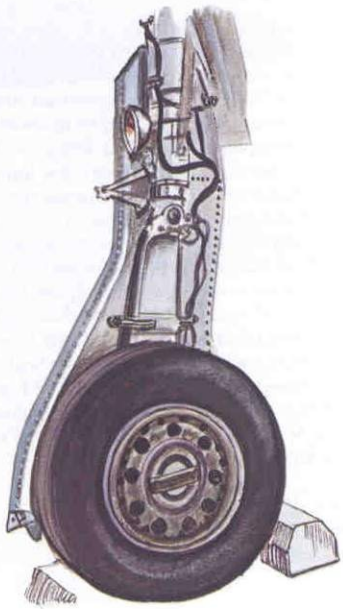
(Above) A Wild Weasel crew congratulates each other on completion of their hundredth mission while getting the traditional wet-down as they dismount from their aircraft. (Brigadier General Don Kutyna)

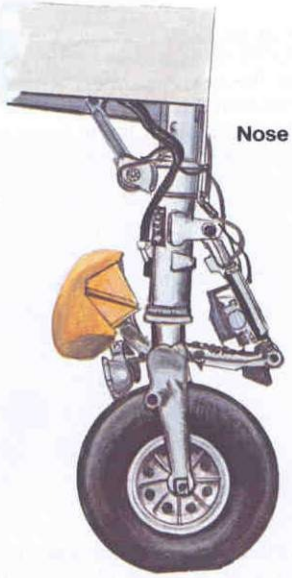
(Below) Thud pilots wearing parachutes, G-suits, survival vests, and some of the standard headgear while on the ground....overseas cap and bush hat. They are telling their crew chief how the plane flew on the mission. The crew chief carries the pilot's helmet bag and flight bag with approach plates, maps, etc.



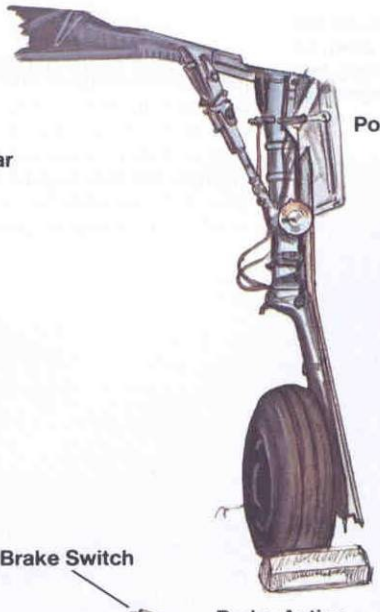
F-105D radar antenna

Starboard main landing gear





Nose landing gear



Port main landing gear

Stick grip

Trim Switch (Pitch and Roll)

Trigger

Freeze Fire Button

Speed Brake Switch

Radar Action Reject Button

Safety Pin Hole

Sight Electric Cage/ Range Cursor Button

Throttle quandrant

Nose Wheel Steering/ Range Scale Button

Landing Gear Warning Silence Signal Button

Microphone Button

AFCS Emergency Disconnect Lever

Throttle

Flap Lever

Pitch and Roll Force Switch Housing (AFCS)

Idle Stop Knob

Yaw Trim Switch

"Roger, Wolf, 2.38."
"Roger that, say temperature."
"93."

I pulled my little chart down from the right canopy rail to check the go/no go on EPR. Sure enough, 93 degrees....2.38 EPR. Well, I don't have to go....I'm golden....it's my 96th mission. The other guys know I don't have to go, but my Wing Commander is sitting there watching, and if I don't go I'm chicken, and they rebuilt the bridge, and they hit me the last time I was there, and if I hold the nose down, it's going to be slow acceleration with the 3,000 pounders, but after I get to 150 knots the lesser drag should help me to really accelerate, if I wait until I get the barrier at the other end, but don't rotate until I hit the overrun, and if I just barely lifted off and get the gear up right away, and if I make an immediate left turn to miss than antenna base that sits out there in that clump of trees 2,000 feet off the end of the runway, and keep it low until I hit the diked road around the perimeter of the base, lift it over the road, then get back down low and accelerate while dodging trees....I'll hold the brakes until the burner is lit, keep my finger on the water button....and, by dam, I'm going to do it! All this goes through my mind in about two seconds.

Now the adrenaline is really pumping. I push the throttle up, and outboard....count, "one thousand one, one thousand two, one thousand three, one thousand four"....the burner lights with a WHOOMP, I jab the water injection, and drop my feet off the brakes at the same time... and,....the instrument panel drops in my lap! I couldn't even pull the throttle back because of all the junk from that panel. I had to take my right hand off the stick, push the panel forward, then pull the throttle back to idle, hit the mike button, and say:

"Takhli tower, Wolf Lead's aborting."
"Is there any problem, sir?"
"No, no problem."

Someone just didn't want me to fly that day, and it's a good thing. I talked to a lot of pilots and maintenance people later who said that I never would have gotten airborne with 2.30 EPR. That was my last attempt at the Doumer Bridge, and the weather broke in a few days, so I finished up my hundred missions in route packs one and two.

While I was flying out of Takhli, an incident occurred that epitomizes what flying Thuds into Route Package Six was all about. Bear in mind that we knew that the restrictions placed on us were preventing victory. Yet we did our jobs, even in the face of the toughest opposition in aerial warfare. A flight of Thuds had just departed runway eighteen at Takhli in the pitch dark of early morning. Number One turned east, with two and three cutting to the inside of his turn to join up. Number four apparently became disoriented watching this turn. There was no horizon ....no lights out there in the jungle....and the turns of two and three made them appear low from four's perspective. Number four flew into the ground, creating an instant and spectacular fireball. The leader of the following flight called Number One, and the transmissions went like this:

"Wolf Lead, Bear Lead."
"Go ahead, Bear."
"Wolf, I think you just lost one."
"Roger Bear. Wolf flight check."
"Two."
"Three."

There followed silence while Wolf Flight waited for number four to check. Finally One came up with:

"Wolf Four, check."

But there was no answer, and after a few seconds, Wolf Lead transmitted:
"Takhli tower, launch the spare."

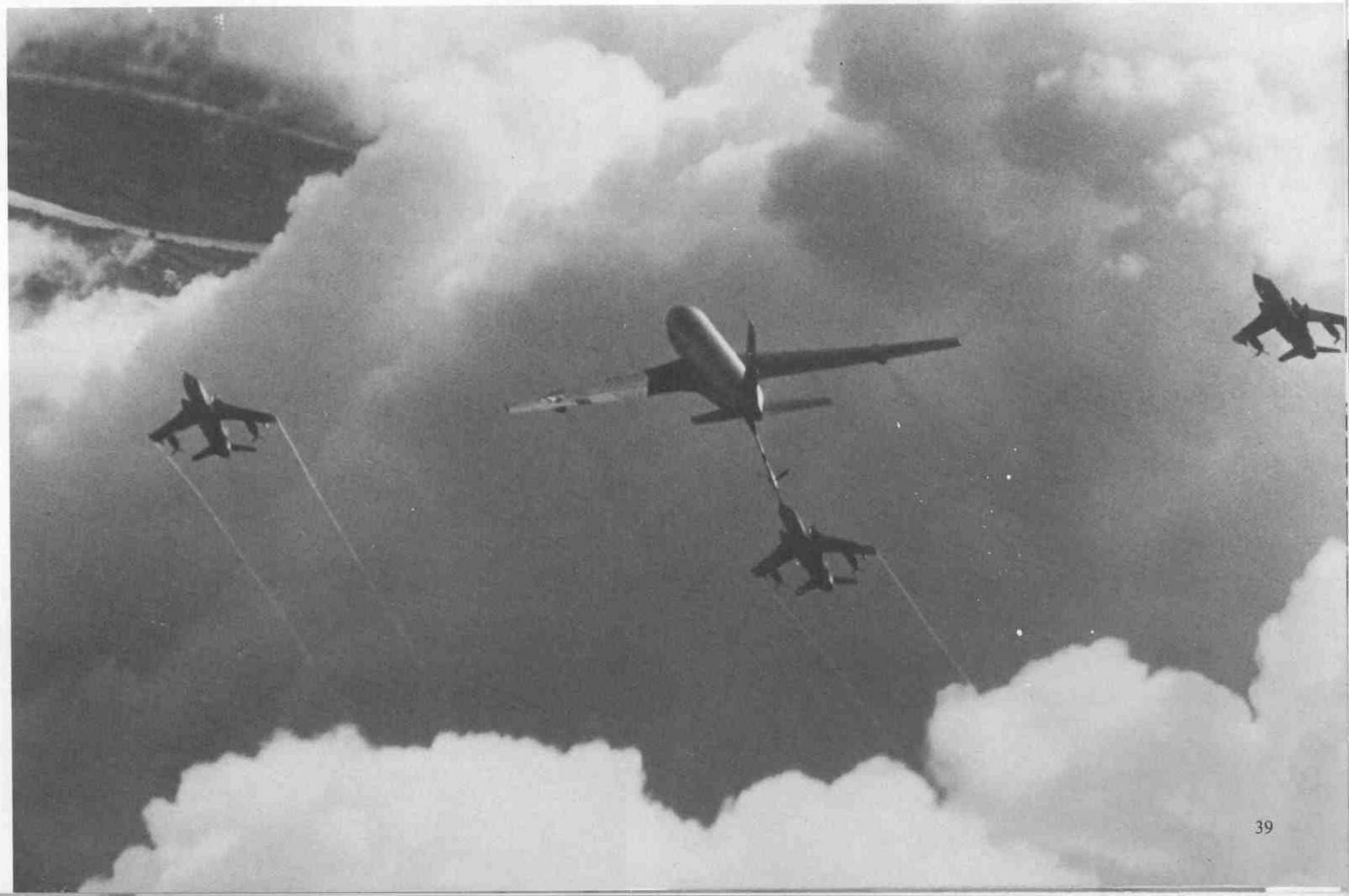
There were no histrionics....no holdup of the flight, and only the briefest delay in executing the mission. That brief exchange speaks volumes for the attitude of those pilots who flew the Thud. Press On Regardless. A final footnote to that story, which reinforces the structural integrity of the Thud. The pilot of Wolf Four survived the crash, even though they found pieces of the airplane one mile beyond where he stopped. The airplane seemed to come apart in stages, with the cockpit separating, decelerating, then the seat separated from the cockpit, and finally, the pilot separated from the seat.

(Below) The Thud would absorb incredible amounts of damage and still return to base. This 105 lost most of its exhaust petal system when hit by a heat seeking missile. The tail of the missile is visible protruding from the fuselage just above the ruler held by the ground crewman. (USAF)

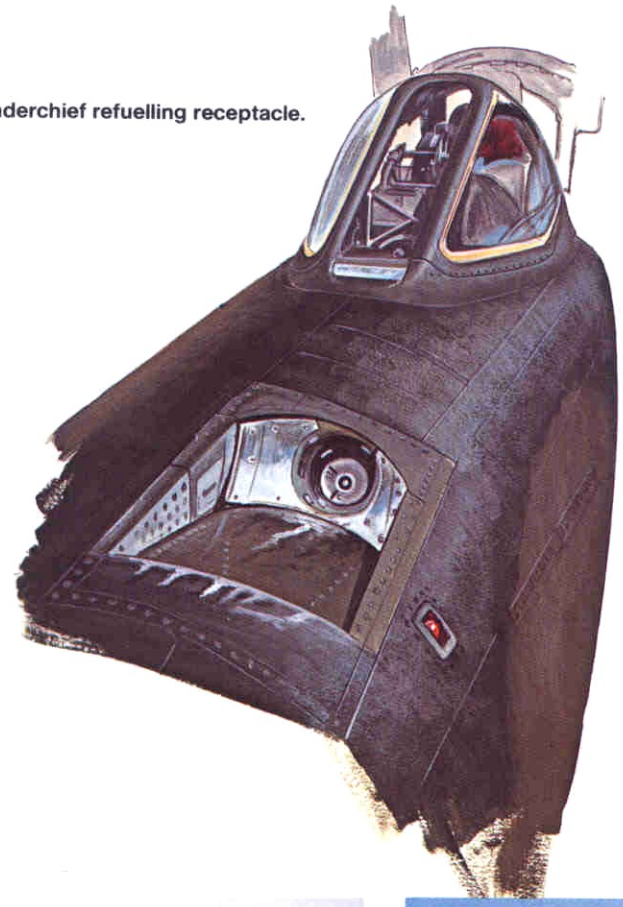
(Below) F-105D-10-RE of the 34th TFS, 388th TFW enroute to North Vietnam carrying what became the most often carried bomb load (six 750 pound bombs on the centerline and ECM pods on both outboard stations). (Al Piccirillo via Norman E Taylor)

(Above) 388th TFW Thuds formate on the tanker while enroute to North Vietnam.

(Below) The warm, humid air of Southeast Asia was perfect for generating wingtip vortice trails. This flight of Thuds is on the tanker during prestrike on 17 October 1968. (USAF by A1C R E Brown)



Thunderchief refuelling receptacle.



F-105G of the 561st TFS, Detachment 1, 388th TFW at Korat RTAB on 4 September 1973. (J Arruda via Norman E Taylor)

F-105G of the 17th Wild Weasel Squadron, 388th TFW carried the names 'NEMESIS' and 'Bonnie and Clyde'. Korat RTAB August 1973. (J Arruda via Norman E Taylor)

F-105F of the 357th TFS, 355th TFW carried the names 'Ramp Tramp' and 'Mr. Flak Bait'. It was flown by Major Merlyn Dethlefsen on his Medal of Honor winning mission of 10 March 1967. (J Arruda via Norman E Taylor)

F-105s of the 357th and 354th TFS, 355th TFW on the tanker enroute to targets in North Vietnam, January 1969. (J Arruda via Norman E Taylor)

THE RED RIVER VALLEY

To the valley he said he was flying,
and he never saw the pay that he earned.
Many jocks have flown into the valley,
and a number have never returned.

(first stanza of the song)

The story of the Thud in combat goes far beyond the capabilities of the air plane. It is also the story of the courage of the fighter pilots who braved a gauntlet of air defenses unlike any previously seen in warfare. And it is the story of some fighter pilots who demonstrated uncommon valor when they were no longer flying, but were fighting an even tougher war....a war to maintain their principles as American Fighting Men in the face of some of the most barbaric treatment in the history of human conflict.

Mo Baker had already had a long and varied flying career when he got to the combat zone in May of 1967. He had flown F-94 Starfires, F-89 Scorpions, F-102 Delta Daggers, and F-106 Delta Darts before checking out in the F-105 Thunderchief. Mo had accumulated some 3,000 hours of fighter time, and had just been promoted to the rank of Major prior to joining the 357th Tactical Fighter Squadron. He had been in the Air Force fifteen years without firing a shot in anger. He was ready to go to war.

The 357th TFS was already at war. It had lost fifty percent of its pilots in the two months preceding Mo's arrival. In the next three months, the 357th would lose seventeen pilots in combat, while rotating only twelve who had finished their hundred missions. The pilots of the 357th knew what those figures meant; if you were flying Thuds to downtown Hanoi every day, your chances of finishing a hundred mission tour were less than fifty percent. In spite of this, they flew their missions, dropped their bombs where ordered, and observed the *silly* rules imposed upon them by *politicians.*

Mo Baker flew sixty missions before he was shot down. He was the senior flight commander in the 357th, and often led the whole strike force. He was always deputy lead and deputy DO in the wing that had a *hard charger* reputation. Aborts were rare. If the airplane would run at all, they tried to get it to the target. He was on the first mission to attack the Doumer Bridge, and watched John Piowaty knock down a span. On his sixty-first mission, the Bac Giang Bridge, he was shot down. This is his narrative of that mission, and the events that followed.

We had a flight of twenty Thuds, all armed with a 3,000 pounder under each armpit. We were carrying 3,000 pound bombs because the month before we had knocked it out, and they had rebuilt it. I told the guys, "Don't miss that dude! There are a hundred and thirty-eight guns around that bridge, and it scares me to go up there! I don't want to have to keep going back!" It was an important target, and they defended it well. 27 August 1967 was a CAVU (ceiling and visibility unlimited) day, so they could see us coming a long way off. There are two ways to approach a target. Either you go straight in, or you buttonhook around it, and come back out low. Well, we chose the latter, and they had plenty of time to range in on us as we popped up for the bomb run.

I rolled over and started down the chute with flak going off all around me. Just about the time I squeezed off the bombs, I got hit. Two shells exploded right behind the cockpit, starting a roaring fire in the main fuel cell. I got a hit on the bridge, but I wasn't paying too much attention to the target right then. Fortunately, I couldn't see behind me, because that big torching fire really scared my wingman. I knew I was in trouble though, just from the idiot panel, which was giving me indications like; 'Oxygen Low' and 'Gear Unsafe' I knew from that that I had been hit in the accessory package, right behind the seat....and if that's hit then the forward fuel cell has to have been hit too. When it starts burning, it is only a matter of time before the tail gets burned off. My wingman could see pieces falling off the airplane, and he was screaming at me to jump out.

Well, I wanted to stay cool....and I sure wanted to project that cool, combat fighter pilot image even with things going to hell in a hurry. I keyed my mike, and said, "Uh, roger, Shark Lead hit." It didn't come out anything like I wanted....I have a naturally high voice, and I am sure only the local dogs heard my transmission! I knew that I was going to have to jump out, but I wanted to get as far away from the target as I could before ejecting. I had lost the hydraulics and was limping along using differential flap to maneuver, flying with one hand on the ejection trigger. Sure enough, something major fell off the airplane, forcing it to snap up and to the right. Then two things happened simultaneously. I squeezed the ejection trigger, but I also reflexively kicked left rudder to correct for the right roll. That put my left leg straight out in front of me when I went out of the airplane. My femur was broken clean through, and a few seconds later I was hanging in my chute with a leg that pointed in the wrong direction. I watched my airplane go straight in, exploding as it hit the ground under my feet. The engine ran great all the way in....it just didn't have any tail on it!

I pulled my emergency radio out just in time to call one of my guys who had pulled off the bomb run and was circling me as I floated down. I knew there was no way for me to get to the high ground with a broken leg, so I told them not to hang around, but to go on home and I would see them after the war. He gave me a real sage piece of advice, "Roger.... make friends down there, Mo!"

My parachute canopy was catching sound from below me, and I could tell by the nature of the chattering that those were not friendly voices. Fortunately, they were not shooting at me, but they were running around in a frenzy trying to figure out where I was going to land. I had cut the suspension lines to make my maneuvering modification on the canopy, and was trying to fly the parachute to a landing spot that would do as little damage to my broken leg as possible. I landed in a rice paddy, rolling onto my good leg. A bunch of North Vietnamese villagers jumped on me almost as soon as I sat up, stripping me down to my underwear. I rolled up into a ball, locking my hands together behind my knees to protect my broken leg. They didn't understand what that was all about, so they started beating me with sticks. But that hurt less than my leg, so I just hung in there and took it until it finally dawned on them that there was something wrong with me.

They picked me up, dragged me into a village, and threw me into a grass hut. When they discovered that my leg was broken, they took great delight in kicking me in the broken leg. The pain was so bad that I would

(Below) Major Elmo C 'Mo' Baker, Takhli, Thailand, August 1967. (USAF)

(Above) F-105D-5-RE 'Daisy Mae' of the 357th TFS, 355th TFW returning to Takhli after a February 1970 mission. (USAF by SSgt J Evans)

scream and faint. When I woke up, some other villager would be there for his turn to kick me and make me faint again. That happened four times before dark. At sunset a militiaman came and ran all the villagers off. He threw me in the back of a little truck and hauled me out of there, but not for any humane reasons. We stopped at four other villages, where he would let the locals beat on me. By now I was really getting groggy. We finally came to a helicopter pad, where they tied my elbows together behind me and blindfolded me. The blindfold wasn't perfect though, and by tilting my head back, I could catch glimpses of what was going on. Pretty soon a big Russian helicopter came in and picked me up. After my four-village-punch-out, I was damn glad to get on a helicopter!

It was a short ride over to Gia Lam, the main airport in Hanoi, but I was still tied by my elbows, and I was riding on my back, so that by the time we arrived, all the hide was worn off my elbows. The helicopter door opened, and someone with a bullhorn started making a speech, the gist of which was, 'Here is a Yankee Air Pirate which we caught trying to bomb the bridge at Bac Giang!' Well, he got the crowd whipped up pretty good, and I could tell by the magnitude of their voices that there must of been a couple of thousand of them. Then about a hundred hands reached in, grabbed me, and dragged me out of the helicopter. They carried me about 300 yards to a jeep. Enroute, everyone got his licks in on me. The guy who had my broken leg discovered that he could turn it some really odd ways, which caused me to scream and the crowd to cheer. He'd turn, I'd scream, the crowd would cheer. He loved it. The guard who had the other leg tried the same thing, but of course, he couldn't get the same amount of turn, or the same reaction from me. Well, that made him mad as hell, and he took his fingernail and dug all the soft flesh out of the back of my good knee. That later caused me a lot of trouble when it got infected. But at the time, I was more concerned about protection from the crowd. A mob can get completely out of hand, and I thought there was at least a pretty good chance that I was going to be beaten to death right then and there.

Well, they finally got me through the crowd, threw me into a jeep, and took me into downtown Hanoi. I was taken to Hoa Loa Prison, where their interrogation teams worked on the new prisoners. Their 'interrogation teams' consisted of professional torturers, and the first one I met was a sadistic character we called 'Bug'. The Bug looked down at me, laying in the middle of the floor. I had just survived a 550 knot ejection, had my clothes ripped off, had those villagers kick the hell out of me, had that crowd kick the hell out of me....and now the Bug, in English, says:

"So! The fat is in the fire!"

That struck me as so ludicrous....I mean, after what I had just been through, here was this guy reciting some phrase that he had learned from an idiom book. I tried to think of another idiom that would qualify as a real snappy comeback, but all I could come up with was:

"And a stitch in time saves nine."

"Exactly!" He says.

He didn't know what I meant, but I found out soon enough what he meant. He went about his work, which was to find out what the next target in Hanoi was. That was his major question.

"What new target Hanoi?"

They would tromp on my broken leg, and I would tell them I didn't know. All I could do was lay there and bleed from all the cuts and contusions the ejection and beatings had produced. They didn't give me any water. They didn't give me any medical treatment, and when the pain got too bad, Mother nature would just turn my switch off and I would pass out. When I came to, they would get back to it. That went on for about a day or a day and a half, and I finally told them that I would have to start lying, because I just didn't know what the next target was going to be.

"Must not lie!" He said.
"Well, I'll have to guess, then." I said.
"OK, we allow you to guess."

They put a map down on the floor in front of me. I rolled over, and through a haze of blood, sweat, and tears, pointed to a spot on the map. He turned the map around, looked at the spot, and said, "That shows you do not cooperate! That is thermal power plant, and it is already destroyed!"

They threw me into a cell, and for the next three weeks I was tortured sporadically for information. I kept asking them to do something about my leg, which by this time had swollen up to the size of my waist and turned various shades of black, blue, and green. Their answer was:

"You do not blame us for that leg. You did that to yourself! If it rots off, we throw you away!"

After all the mistreatment my leg had suffered, I was sure it was gangrenous, and that I was going to lose it. What the Bug was saying was, "If your leg has to come off, we will just dispose of you, because we don't do major amputations....we have many more prisoners to pump for information." I believe he was being honest, because we didn't bring back any POWs who were amputees. We had 357 guys who were over there

(Below) Thud going down in flames after being hit by NVA AAA. (Koku Fan)

(Above) Bac Giang Rail Road bridge under heavy bombardment by the 355th TFW in July of 1967. (USAF via John Piowaty)

more than five years....they all came back with all their limbs. That indicates to me that if I had lost that leg, I would not have come home.

After about three weeks, a doctor we called 'Mr. Peepers' because of his coke bottle glasses, looked at the leg and said he thought they could pin the leg back together. They took me to Bac Mai Hospital, where I met the Vietnamese surgeon who was going to do the job. He spoke French, so I could communicate in a very rudimentary way with him. They didn't do the operation right away though, and while I was there it was a very dangerous situation. Here I was in a hospital full of bomb victims, and believe me, there were some pretty scary friday night movie scenes! They had me locked in a ward, but the French doors at one end were just secured by a rag tied around the door handles. The door at the other end was locked. One night I heard someone trying to get in through the locked door, and they were trying very diligently! I figured I was going to be at war again very soon, but this time all I had to fight with was a pillow and a tin cup. After a few minutes, they gave up and went around to the French Doors. The French Doors gave a little, and I could see the face of a really angry looking militiawoman in the crack between them. I recognized her as one who had shook her fist at me and swore as I was being brought into the hospital.

She stuck a bayonet through the crack in the door, cut through those rags, and burst into the room. I really thought I had had it when she rushed over to the bed, stuck the bayonet in my face and started chattering away in Vietnamese. But then the surgeon came in and said that they had broken the key off in the lock on the other doors, and had had to ask her to help them get into the room!

I got out of the hospital about 30 days later, and was returned to what they called 'routine' prison life. This 'routine' continued throughout the rest of 1967, all of 1968, and into early 1969. They would take us out about once a week and tromp on us....they were just damn hostile! In terms of interrogation, they never used deception or psychological coercion. The Vietnamese were not that sophisticated. If you refused to answer bluntly....head-on....nose-to-nose....

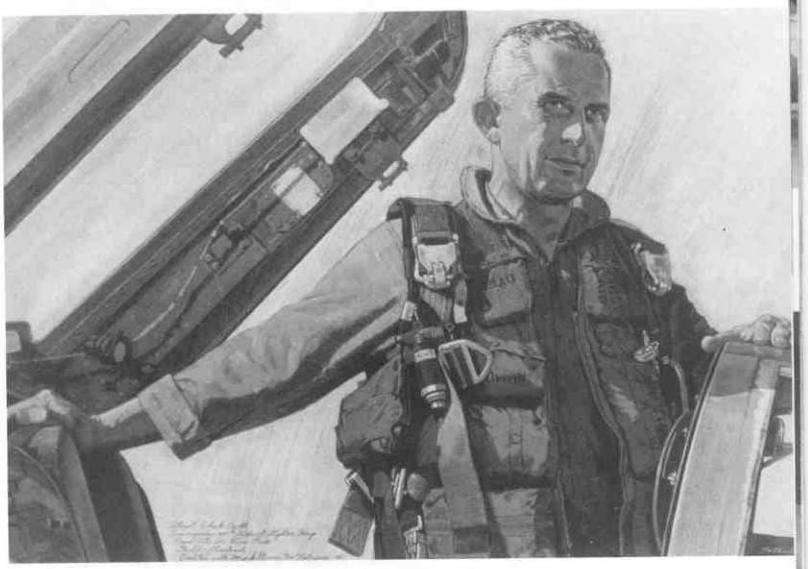
"NO, I'm not going to tell you"

The Vietnamese didn't know anything about finesse....they just went straight to the full-up torture thing. They just beat the hell out of me if they figured I was lying.

The only way to avoid that....all busted up and lying in the bottom of a cell....was to go to secondary delaying tactics that would include, "I don't know....I'm too dehydrated....I'm delirious....I can't remember....etc". I worked at that as long as I could to avoid giving them anything of value. Your importance to the enemy, from an intelligence standpoint, is only about two weeks. After that, the tactical situation and tactics themselves have changed to the point that anything you give them is going to be dated.

Shortly after I got out of the hospital, I was confronted by the camp commander. He was angry because I had not given them any kind of a written statement. They tromped on me, and demanded the names of all the guys in my squadron. I said there wasn't anyone left there except

(Above) Kep Rail Road Yard was struck by the 355th TFW on 30 October 1967, rendering the yard and transshipment points unserviceable. (USAF via John Piowaty)



(Above) Portrait of Colonel Robert Scott, CO of the 355th, painted by Nathalee Mode. (Courtesy Col Robert Scott)

(Below) 44th TFS Thud with a load of 500 pound bombs in its revetment at Takhli prior to a 1970 mission. (Brigadier General Don Kutyna)

old majors.

"Write down all the old majors you know!" They said.

"So, being an old St Louis Cardinals fan, I wrote Marty Marion, Dizzy Dean, Stan Musial, Gabby Street, and all the old Cardinals I could think of. He looked at that list, and said, "This Gabby Street....he old major?"

"He's REALLY old!" I said.
"We check this from other sources!"
"Fine", I said. "I hope none of them have transferred out."

We had these weekly wars with our interrogators up until the time that Ho Chi Minh died in September of 1969. When he crapped out, the worldwide pressure to release information on the POWs seemed to take hold. Right away, they stopped their routine beating of the prisoners. They were still hostile in their interrogations, but they didn't seem as willing to use torture. We had become experts in brinksmanship too, always bringing them right to the brink of inflicting pain before giving them anything.

Our methods of communicating with each other got better too. The more they tried to stop us, the better we got at it. For instance, they would try to restrict the 'breather holes' in our cell walls by putting vines over them. This resulted in smaller openings, but since we communicated by putting a piece of paper over the hole and removing it in time with coded frequencies, it made it tough for the guards to see anything unless they were perfectly boresighted on the holes. We had three basic channels of communications, and all of our communications were treated as 'Official Business'. If a guy tapped on your wall and asked, 'What's the difference between a sugar mule and a cotton mule?' We would hang our butts out to get the answer for him, because it might be the difference between his keeping his sanity or not. If he was willing to chance getting beat up to ask the question, we figured it was damn important to him, and we went all out to get the answer. By the way, that was an actual question....one which I answered because I happen to be from Missouri. The question would be tapped through every wall until an answer was found. Our communications were vigorous, and so went our communications, so went our morale.

Even though it was all official, sometimes it could be funny. We had a couple of new guys come in, and when we finally established communications via the tap code, the first thing they came across with was the fact that there was a monster spider in their cell. They wanted to know what to do. I tapped:

"Run for your lives!"
"Get serious....this thing is big enough to eat birds!"
"OK, sacrifice a virgin!"

There were plenty of bugs, and if you couldn't kill them yourself, you had to get yourself a designated bug killer.

We had to laugh to keep our sanity. My room mate, Larry Carrigan, was scared to death of snakes. He was a ferocious warrior, who would face a whole battalion of Viet Cong barehanded, but would run from a snake. When they finally let me take my first shower, after my return from the hospital, he accompanied me. He said, 'Now, Mo, be careful out here....there are all kinds of snakes!' Well, as I am stumping out to the shower, he yells, "Look out, there's one in the gutter!" I looked down and saw one of the huge Vietnamese earth worms slowly making it's way down the gutter. I picked it up, and said, "Here Larry, you can have this one!"....and threw it at him. You should have seen him run!

When I got a transfer to Son Tay, they pulled me out of my cell the first day and said, "This a working camp! You must earn your lunch!" They gave me a piece of iron pipe about a foot long, and pointed me at a pile of bricks they wanted broken up. Well, that pipe and those bricks looked like the best telegraph system I had seen, so I tapped out the old "Shave and Haircut", and was immediately answered with a chorus of coughed "Two Bits" from about fourteen prisoners. My audience was ready! I beat those bricks up telling them my name, where I had just come from, who was with me, who our camp commander was in Hanoi, how many men there were there, who they were, and proceeded to give them all the news I had. I got blisters on my hands, but had to keep asking them for more bricks so I could continue communicating! We kept it up all day, giving them the news from home, according to the latest shoot-downs.

SON TAY

They closed Son Tay down a month before the raid. In my opinion it was just a casual move on their part....I really don't believe they had any intelligence on the raid. Oh, we had seen recce birds come over. One day, we saw a Firebee (RPV) come over, and we laid down and smiled so it could get our picture. But that was not such an unusual happening. It was just dumb luck that they closed the place down just before the raid. Son Tay was a tough place to supply, and a series of dry wells must have convinced them that it was more trouble to maintain than it was worth. When they moved us, there was no panic. One day they came around and inventoried all the ducks and pigeons. Next day, the pigs. Next day, our stuff, and decided how many trucks they would need. They moved us to Dong Hoi Barracks, which was about nine klicks from Hanoi. We were there two or three weeks when the Son Tay raid occurred. We could hear all the shooting and we jumped to the bars to see what we could see. It was about nine klicks away, and we saw the local SAM site fire off all of his missiles, then we saw the flares over at Son Tay and we knew we were missing our ride home. We all knew that.

After the Son Tay raid, they got scared and moved us all to Hanoi, where we would be less accessible to any raiders. It was crowded enough that we all had room mates, which helped our morale a great deal. We were able to help each other in ways that we never could before.

When the B-52s started eating the edges off Hanoi in 1972, we knew damn well we were getting close to getting out of there. When we heard, in 1968, that a bombing halt was in effect, we knew we were stuck until it was cancelled. That turned out to be a four year hitch, but when the bombers came north again, and started eating Hanoi's lunch, we loved it! We were just tickled to death to hear those strings of seven fifties roll through Hanoi. As soon as the first bombs dropped on Hanoi, the Vietnamese whisked half of us....half of their trading pieces....off to Cao Bang, which is up near the Chinese border. It was in the buffer zone, where a bomb had never been dropped. They were not taking any chances on losing us as pawns.

When they got us up there, the treatment changed immediately. They started recognizing our rank. They told me that I was responsible for making the group behave. The food wasn't good, but there was more of it, and I actually gained about ten pounds. (From 125 pounds to 135 pounds....I had been shot down at 165 pounds). It became a live and let live situation, and we knew that when we came back from Cao Bang, it would be to go home. I was released in March of 1973.

(Below) Lt Col 'Mo' Baker steps off the MAC C-141 that delivered him from Hanoi to Clark Air Base in the Philippines in 1973. (USAF)

RIVER RATS

The Red River Valley Fighter Pilots Association (RRVFPA) takes its name from the river that runs through what were the most heavily defended areas of North Vietnam during the air war. RRVFPA was started in 1967 as a modest attempt to share tactics and blow off steam with an informal gathering of fighter pilots. Its founder was Colonel Howard 'Scrappy' Johnson, deputy commander for operations (DO) of the 388th TFW at Korat RTAB in 1966 and 1967. Scrappy got the idea from Colonel Robin Olds, CO of the 8th TFW, who had hosted a tactics symposium at Ubon RTAB early in 1967. This meeting resulted in development of some good information, which was promptly buried in the bureaucracy which thwarted commanders throughout the war. In order to by-pass some of this bureaucracy, Scrappy Johnson proposed to his Wing Commander, Colonel Bill Chairsell, that they host a dining-in and, just coincidentally have a discussion of tactics. Chairsell agreed, and plans were made for the first meeting.

In order to organize and better control the air war over North Vietnam, that country had been divided into several areas by the Generals running the air war. These areas were referred to as *Route Packages*. Beginning with Route Package One, which was just north of the Demilitarized Zone separating North and South Vietnam, the packages ascended into the heart of the Red River Delta around Hanoi and Haiphong. There were six Route Packages, and Pack 6 was the toughest....the major leagues of air warfare. By 1967 the Hanoi-Haiphong areas were the most heavily defended in the history of aerial warfare. When you went to Pack Six, you had better have your stuff together if you wanted to survive. You had to hone your instincts to a fine edge, and use every tactic and trick you could remember or invent. And, if you survived, you probably had something to add to the tactics books being developed for tomorrow. At least....Scrappy Johnson thought so, and he proposed to bring every veteran of the air war over Pack Six to Korat RTAB on 22 May 1967 for a 'tactics conference'.

Getting everyone who had flown a mission into Pack Six at one place at one time was impossible under the circumstances (there was still a war to be fought), but there were enough delegates at that first meeting to make it more than memorable. C-47 transports brought the delegates to Korat and as they deplaned, they were greeted by Thai beauties, and assembled for the opening parade, which featured Elephants ridden by honored guests, such as Robin Olds and Chappie James. The 13th Air Force Band performed a concert, and the tactics conference was convened in mid-afternoon to discuss methods for coordinating the many units striking targets in Pack Six. The conference was concluded in late afternoon, and a second parade finally ended at the Officers Club, where some serious drinking and hell-raising put the seal of legitimacy on this gathering of fighter pilots. The official name, 'Red River Valley Fighter Pilots Association' was coined at this meeting, which was such a success that another was scheduled for Ubon later that summer.

The second tactics conference took place at Ubon on 18 August 1967. Water buffaloes replaced elephants in the parade, and Grand Marshall of the parade was Captain Darrell D Simmonds of the 8th TFW, whose claim to fame was the shooting down of two MiG-17s within two minutes, using less than 500 rounds of ammunition from his Vulcan 20MM gun pod. The first dining-in followed the tactics conference, with Chappie James as Master of Ceremonies. The nickname *River Rats* and the rat patch were born at this reunion.

(Below) Flight of Thuds returning to Takhli. (Don Kutyna)

The first of the *party suits* began to show up at the third tactics conference, held at Takhli on 30 November 1967. The party suit is a highly tailored flight suit, on which the wearer displays his unit and mission patches. These suits came in various colors and imaginative tailoring styles, and remain in vogue with the Rats to this day. The parade was bigger and better than ever, the tactics conference trenchant, and the dining-in was spiced with lusty songs..... straight from the official *RIVER RATS SONG BOOK* that was presented to each delegate. The following day, the host 355th TFW loaded the delegates on Gooney Birds and flew them to Bangkok for R&R.

The 432nd TRW hosted the next conference at Udorn RTAB on 7 March 1968. It was another memorable two day affair, beginning with the now-traditional parade, followed by the tactics conference, dining-in, rough and tumble bar action that included MiG Sweeps, Dead Bugs, and Night Carrier Landings. The next day was a day at the beach....Pattaya Beach, which was suitably adorned with imported beauties. The last of the Tactics Conferences took place back at Korat on 14 June 1968. This was not so much tactics conference as it was pure reunion-cum-bash! President Johnson had called off Rolling Thunder the previous February, and those big strike forces were no longer going to Pack Six. There were fewer and fewer of the River Rat founding fathers in Southeast Asia, and the next meeting was not held until the following year.

Stateside meetings were held at Wichita in 1969, after Colonel Larry Pickett had organized the River Rats in the USA. It was decided that these reunions could not be called *real* reunions until the POWs had come home. Accordingly, *practice reunions* were held at San Antonio in 1970, San Diego in 1971, and again at Wichita in 1972. One of the most important objectives of the war had now become the return of the POWs and the healing of the wounds of the war. The Rats had elected their first president (Scrappy Johnson of course) in 1969, and had ratified their charter. Their mission now was to lobby for return of the POWs as soon as possible, and to provide whatever aid they could to the loved ones of their fallen comrades. It was the latter which prompted the establishment of a scholarship fund for the children of the men who didn't come back. The scholarship fund has become the mission of the Rats, and has kept the association going like no need to relive days of glory ever could.

The first *real* reunion took place in Las Vegas in 1973. It was attended by 2,700, including the returned POWs. This was as close to the glorious homecoming traditionally granted returning warriors as most of these men would get, and for the majority, it was all they needed. It was one emotional high after another as old friends were greeted, and those life and death missions were experienced through yet another debriefing.

There has been a *real* reunion every year since. The scholarship fund has grown in size, and has provided education for many children of the men who made the ultimate sacrifice for their nation, and for what they believed in. The River Rats have pledged never to forget those men, and to make sure that the new generation of fighter pilots will understand the air war over North Vietnam. Membership requirements for the Rats have been liberalized, you must be a fighter pilot....in fact or in *spirit*....to belong.

One of the most hard-core groups within the diverse Rats membership is the Thud drivers fraternity. Thud drivers always seem to attend the reunion in numbers out of all proportion to their number on the membership roster. They have never been without representation on the Board of Directors, and they are tireless supporters of the Association and its goals. They often bemoan the fact that more 'actually qualified' (one mission to Pack Six) members don't take an active interest in the Association, but that does not stop them from spending their time and talent to enhance the scholarship fund....or to get the message across to the American people *Don't send a new generation of fighter pilots to fight a war you don't intend to win!*

Those wishing to contribute to the River Rat's Scholarship fund should make their checks payable the Red River Scholarship Fund and mail it to:

The Red River Valley Association
8612 Tamarac Lane
Wichita, Kansas
67206

(Above) 'The Polish Glider' was flown by then Major Donald Kutyna with the 44th TFS, 355th TFW. (Don Kutyna)

Markings

It is a time honored custom for fighter pilots to adorn their aircraft with names and/or artwork, and the more difficult and dangerous the missions flown by a unit, the more prevalent the aircraft names and/or artwork on their aircraft. The air war in Southeast Asia produced its share of named airplanes, and the tremendously dangerous missions flown by Thuds guaranteed a lot of names. Often an airplane carried several names as it was passed from pilot to pilot, and crew chief to crew chief. The F-105s of the 355th TFW are typical in this regard. John Coon was assigned to the 355th in 1969 and 1970. He made the following notes on the Thuds of the 355th during this period.

333rd Tactical Fighter Squadron – LANCERS

RK tail code, Red radar reflector, aircraft names on intake in White letters on Red background. Crew names on canopy rail in Red letters on White background.

AIRCRAFT	SERIAL NO.	NAME/REMARKS
F-105D-30-RE	62-4259	CAJUN QUEEN (On Intake).
F-105F-1-RE	63-8285	HONEY (Both intakes). Previously PORKY Pig (intake).
F-105D-30-RE	62-4253	RAJIN CAJUN (intake), RYCH BITCH (intake). Previously THUNDER BEE (intake).
F-105D-10-RE	60-0445	SPARTAN (stylized letters on intake).
F-105D-10-RE	60-0449	JOSE SHILLELAGH (intake).
F-105D-10-RE	60-0458	SWEET LINDA (intake). Previously ANDY CAPP (fuselage below wing). Previously WHITE LIGHTNING (intake).
F-105F-1-RE	63-8320	COOTER (both intakes), 3 MiG kill stars below canopy.
F-105D-25-RE	61-0220	PLEASURE SEEKER (intake). Previously JEANIE (December 1966-August 1967, while assigned to 469th TFS, 388th TFW at Korat RTAB – both intakes). Previously I DREAM OF JEANIE (fuselage below cockpit, both sides, while assigned to 469th TFS) Crashed 15 April 1970, 5 miles north of Takhli RTAB).
F-105D-31-RE	62-4384	BIG RED (both intakes).
F-105D-10-RE	60-0480	AVENGER II (both intakes).
F-105D-10-RE	60-0498	Previously BOOBS (both intakes.)
F-105D-5-RE	59-1729	TAKHLI TAXI (both intakes), SAM missile destroyed radar and fire control system in late 1968 or early 1969.
F-105D-10-RE	60-5375	OLD CROW II (intake), artwork (fuselage below cockpit), 355th TFW commander's aircraft, 15 June 1970. Previously THE BALD EAGLE (fuselage below cockpit), 355th TFW commander's aircraft, 27 June 1969-14 June 1970. Col Heath Bottomly.
F-105D-31-RE	62-4344	WELFARE CADILLAC (intake), The WYOMING THUD (intake.) Previously RITA BABY (intake).
F-105D-15-RE	61-0064	PUNKIN' II (intake), WILLY (intake).
F-105D-10-RE	60-0451	BILLIE BABE II (intake). Previously LITTLE LANCER (intake), 333rd TFS commander's aircraft early 1969 to early 1970 – Lt Col Richard Little. Crashed 20 April 1970 in Laos. Pilot was Capt White, brother of Astronaut Ed White who died in Apollo I fire. One MiG kill star.
F-105F-1-RE	62-4416	
F-105D-31-RE	62-4347	CALAMITY JANE II (intake).
F-105D-6-RE	59-1772	Two MiG kill stars, shot down 27 January 1970 over Laos.

(Above) 'Running Gun V' of the 333rd TFS loaded with AGM-12 Bullpup on the port wing and a 650 gallon centerline tank. (John Coon)

(Above) 'Avenger II' of the 333rd loaded with 3,000 pound bombs. (John Coon)

(Above) 'Honeypot II'/'HAVE GUN WILL TRAVEL' of the 354th TFS. (John Coon)

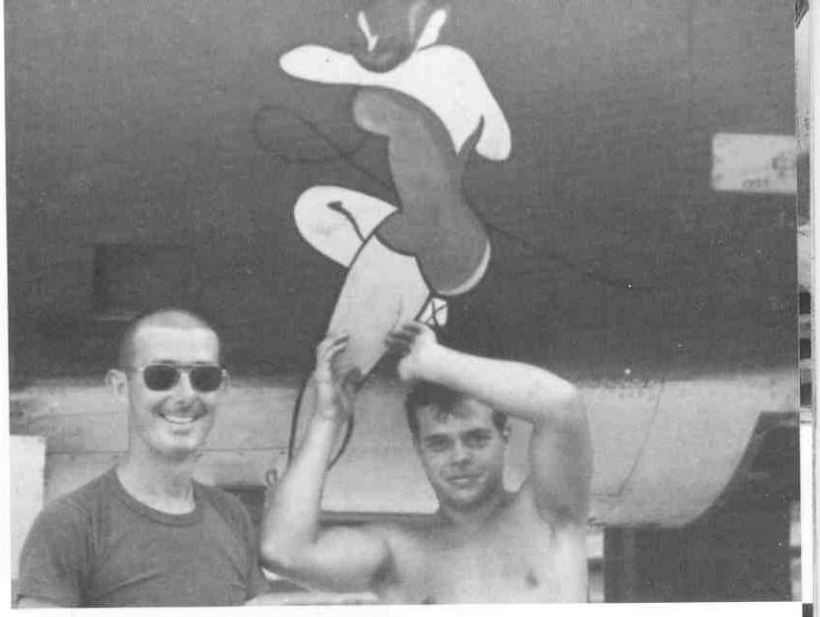
(Below) 'Memphis Belle II' took as its namesake one of the most famous B-17s of WWII. It was flown by Major Buddy Jones, of Memphis, Tennessee. (John Coon)

354th Tactical Fighter Squadron – BULLDOGS

RM tail code, Blue radar reflector. Aircraft names on intake Blue letters on White background, or White letters on Blue background. Crew names on canopy rail, Blue letters on White background.

AIRCRAFT TYPE	SERIAL NO	REMARKS
F-105F-1-RE	63-8311	SAM FIGHTER (fuselage below cockpit).
F-105F-1-RE	63-8351	
F-105F-1-RE	62-4415	SAM SEDUCER (intake) artwork on fuselage below cockpit. Previously NIGHT BIRD (intake), crash landed and burned 16 April 1970, Takhli RTAB.
F-105F-1-RE	62-4446	THE SILENT MAJORITY (fuselage below cockpit)
F-105D-31-RE	62-4360	IRON DUKE (both intakes).
F-105D-10-RE	60-0490	CAPTAIN RADIO (both intakes).
F-105D-30-RE	62-4244	LAMAR JEAN II (intake). Previously HIGH STEPPER (intake).
F-105D-5-RE	58-1167	MARY B (intake).
F-105D-6-RE	58-1171	FOLEY'S FOLLY (fuselage below wing). Previously OHIO EXPRESS (pre - 1969 fuselage below wing).
F-105D-25-RE	62-4228	PAPA THUD (intake) MUTT'S MAN -O-WAR (fuselage below cockpit).
F-105D-10-RE	60-0533	PLAYBOY (intake). Previously SUSAN II THE PLEASURE MACHINE (intake).
F-105F-1-RE	63-8287	MISS MARGO (fuselage below cockpit). FLAK MAGNET (both intakes).
F-105D-20-RE	61-0159	HONEYPOT II (fuselage below cockpit). HAVE GUN WILL TRAVEL (fuselage below cockpit), one MiG kill star. As of 1 February 1970 this aircraft had more than 4,000 hours and 600 combat missions to its credit. Making it the high time Thud.
F-105D-5-RE	58-1152	THE RIPPER (intake). Previously REPUBLIC'S EDSEL (pre-1969 intake). Aircraft assigned to Michael P 'Rip' Blaisdell, former Thunderbird.
F-105D-10-RE	60-5376	EXCEDRIN HEADACHE #105 (in Red, White and Blue letters with camouflage background on intake). Previously VALIENTE (intake). Previously RUM RUNNER (intake). Hit in tailpipe by AAM in 1968.
F-105D-5-RE	59-1743	LEAD ZEPPELIN (intake) artwork on fuselage below cockpit. Previously ARKANSAS TRAVELER (pre-1969 fuselage below wing).
F-105F-1-RE	63-8353	BILLIE FERN (both intakes). THUNDERCHIEF (fuselage below cockpit).

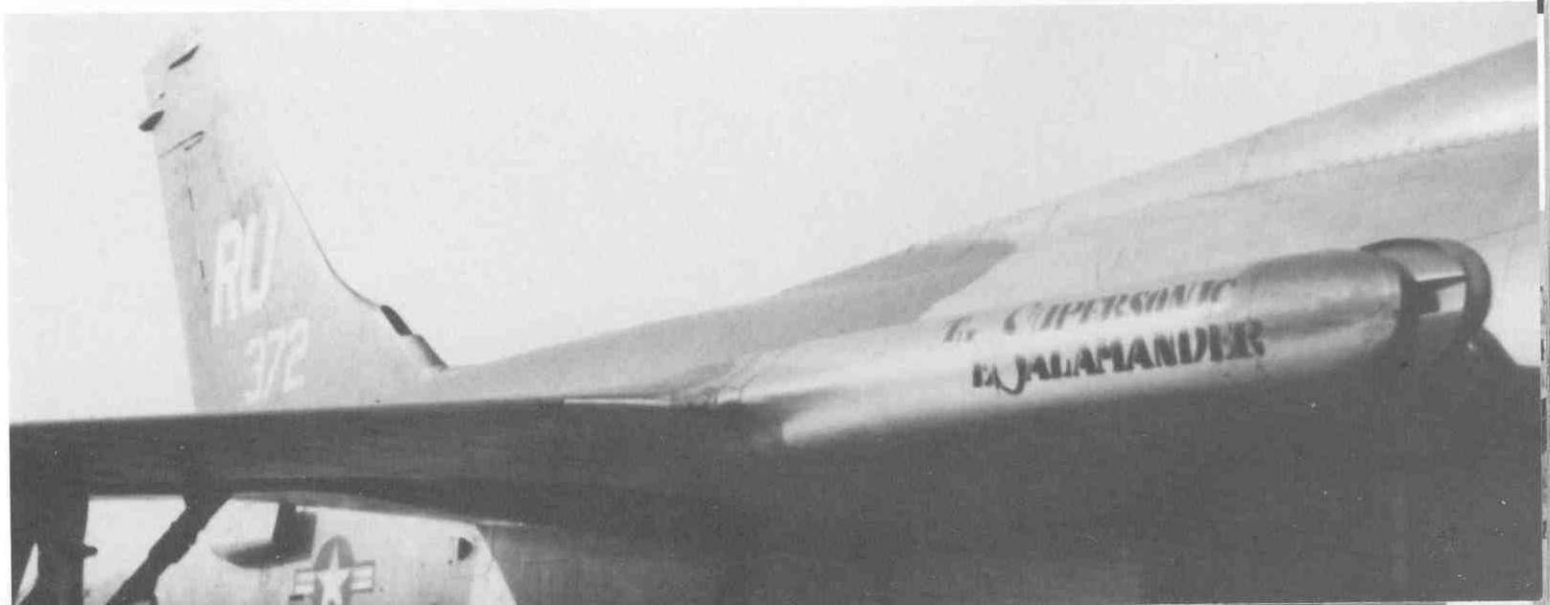
(Below) 'The SUPERSONIC SALAMANDER' flew with the 357th TFS. (John Coon)



(Above) The artwork on 'Memphis Belle II' was identical to that carried on its WWII namesake. (John Coon)

(Above) F-105F 62-4424 of the 357th TFS carried the name 'Tyler Rose' on left intake and 'Puerto Rican Air Pirate' on right intake. (John Coon)

F-105D-31-RE	63-4387	Previously SWEET BIPPY (intake).
F-105D-25-RE	61-0188	STEPHANIE ALLISON (intake).
F-105D-15-RE	61-0071	COMMIE STOMPER (fuselage below cockpit).
F-105D-25-RE	62-4230	LAMAR JEAN (intake). Crashed 15 March 1970 in Thailand.
F-105D-15-RE	61-0063	
F-105D-25-RE	61-0212	PEACE ENVOY (fuselage below cockpit). Previously RUNNING GUN V (both intakes).



357th Tactical Fighter Squadron – LICKING DRAGONS

RU tail code, Yellow radar reflector. Aircraft names on intake Black letters on Yellow background, crew names on canopy rail Black letters on Yellow background.

AIRCRAFT TYPE	SERIAL NO	REMARKS
F-105D-20-RE	61-0134	
F-105D-25-RE	62-4229	JEANIE II (both intakes) I DREAM OF JEANNIE (fuselage below wing. Previously SNEAKY COYOTE (fuselage below wing), 357th TFS commander's aircraft, July 1970 to Novem ber 1970, Lt Col Jack Spillers.
F-105D-30-RE	62-4246	THOR'S HAMMER (both intakes).
F-105D-31-RE	62-4318	IRON BUTTERFLY (fuselage below cockpit).
F-105F-1-RE	63-8284	HAZEL BABY (intake), THE GLENNA B (intake).
F-105F-1-RE	63-8301	THE MOONLIGHTER (intake).
F-105F-1-RE	63-8313	TRUE GRIT (intake). Previously ROAD RUNNER II (intake).
F-105F-1-RE	63-8321	MISS LUCKY (intake). Returned to SMAMA on 3 April 1970 because of structural damage caused by combat damaged wing.
F-105F-1-RE	63-8306	BAD SAM (fuselage below cockpit).
F-105F-1-RE	62-4424	PUERTO RICAN AIR PIRATE (right intake), TYLER ROSE (left intake).
F-105D-15-RE	61-0100	HOT STUFF (both intakes).
F-105D-25-RE	61-0165	
F-105D-5-RE	58-1172	DAISY MAE (both intakes), artwork on fuselage sides below cockpit.
F-105D-25-RE	61-0176	THE JOLLY ROGER (both intakes. Previously THE MAX BEAK (intake). Previously PATIENCE MY ASS (fuselage below cockpit).
F-105D-25-RE	61-0204	THE HUMMER (intake).
F-105D-31-RE	62-4372	THE SUPERSONIC SALAMANDER (intake, Black letters on camouflage background).
F-105D-31-RE	60-0517	OTIS (intake).
F-105D-10-RE	60-0455	KAY'S BABY (intake). Previously MATZOH BALL SPECIAL (intake).
F-105D-10-RE	60-0504	MEMPHIS BELL II (both intakes) artwork on fuselage below canopy, 2 MiG kill stars. Pilot Major Buddy Jones from Memphis, Tennessee.
F-105D-5-RE	59-1731	THE FRITO BANDITO (both intakes), artwork on fuselage below cockpit.
F-105D-6-RE	59-1771	UNDERDOG II (intake), transferred from 354th TFS January 1970.

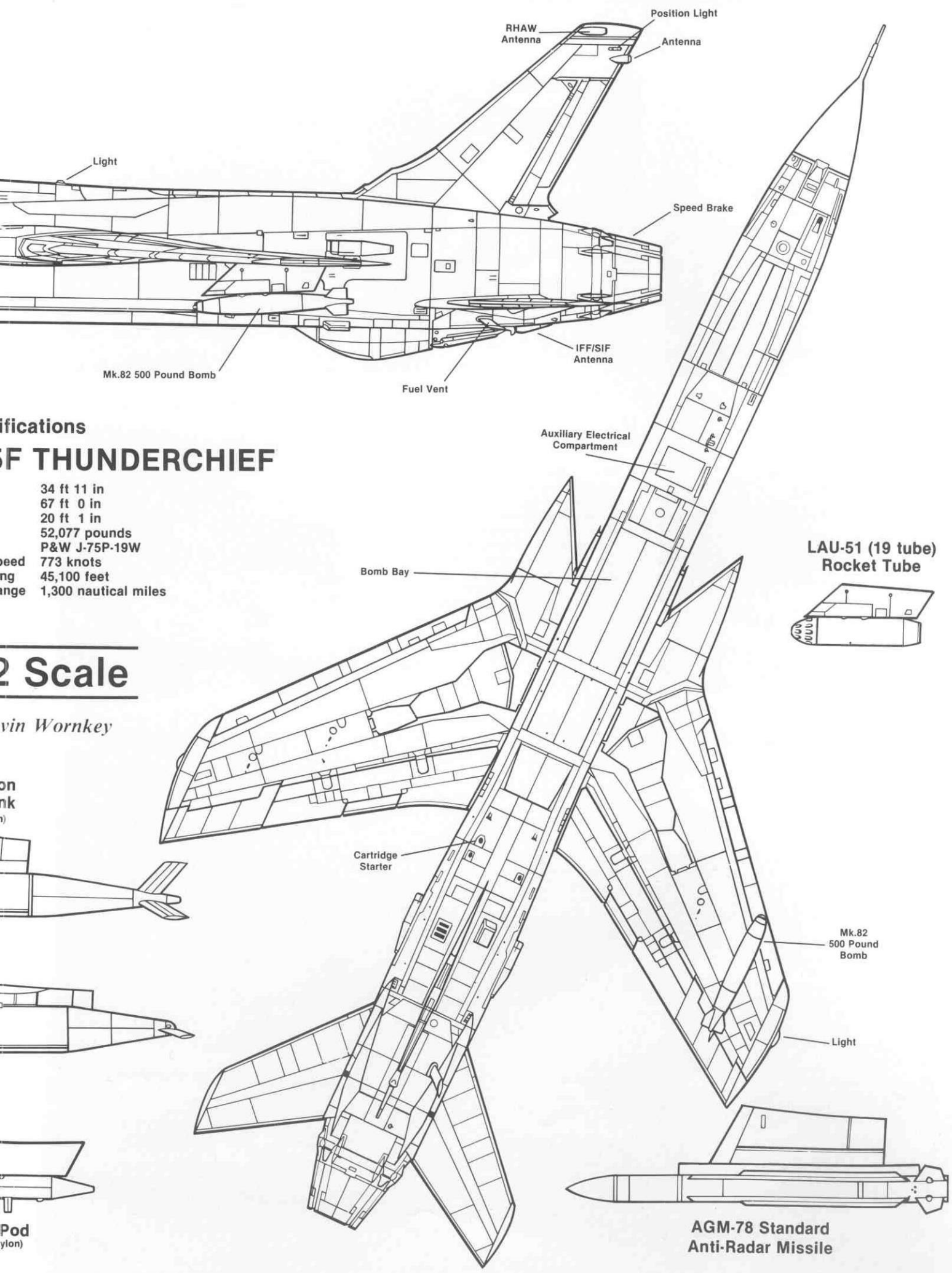
(Above) 'BIG RED' of the 333rd TFS. (John Coon)

(Above) 'The Jolly Roger' of the 357th TFS. (John Coon)

(Above) 'Sinister Vampire' of the 44th TFS Vampires, an F-105F loaded for a Wild Weasel mission with Shrike Anti-radiation missile. (John Coon)

(Below) F-105D-15-RE 'The Robin' later flew as 'The Cavalier', also with the 44th TFS. (John Coon)

The names and artwork appearing on 355th TFW Thuds was often imaginative and well-done, though just as often lost in the dull green camouflage paint. For example, a shapely pin-up girl is outlined behind the name 'Mutt's Mano' War (above left), and "Daisy Mae" is only just apparent (above right). 'THE BALD EAGLE' is nearly invisible above the name (Right). (John Coon)



ifications

5F THUNDERCHIEF

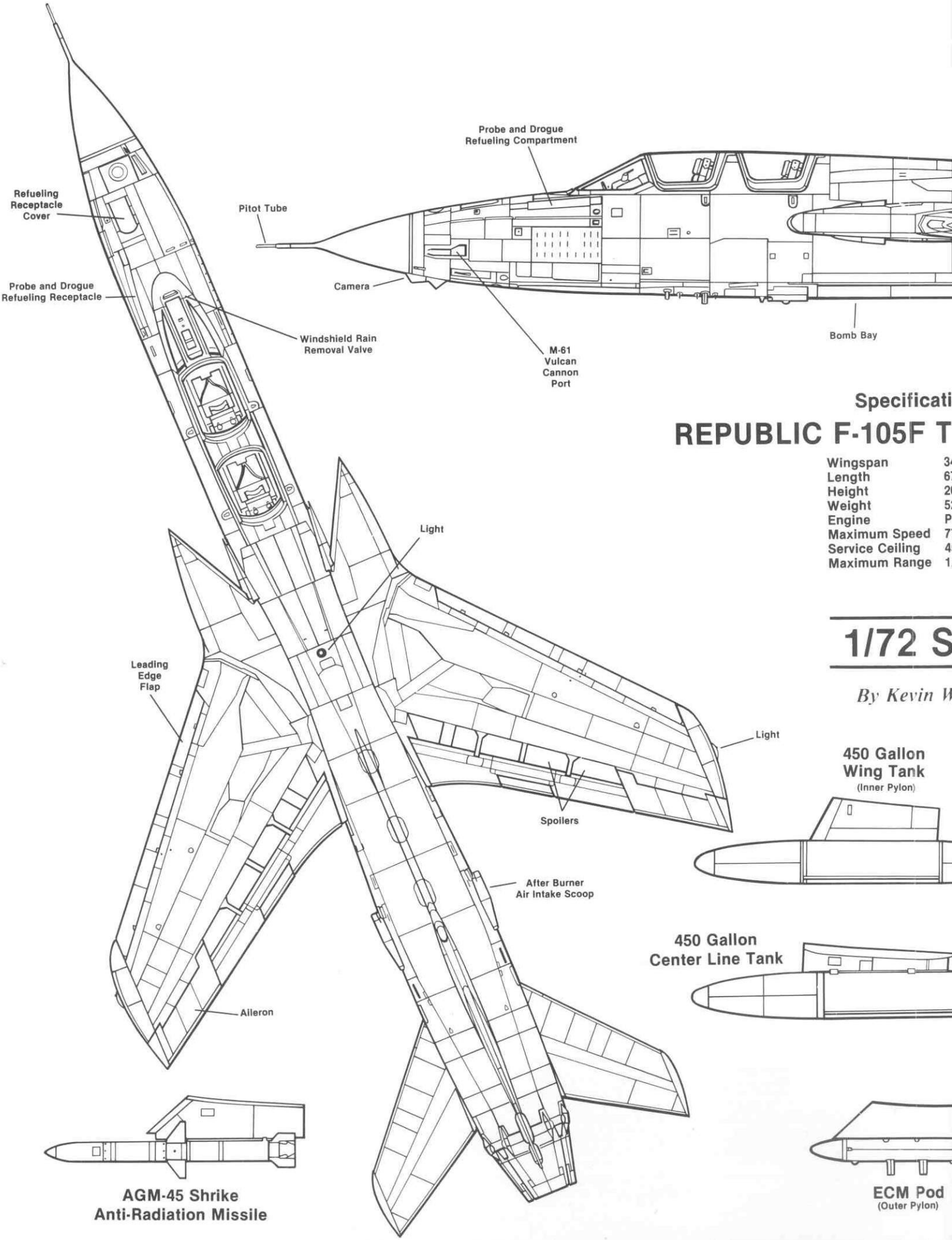
	34 ft 11 in
	67 ft 0 in
	20 ft 1 in
	52,077 pounds
	P&W J-75P-19W
peed	773 knots
ng	45,100 feet
ange	1,300 nautical miles

2 Scale

vin Wornkey

on
nk
n)

Pod
ylon)



Specificati

REPUBLIC F-105F T

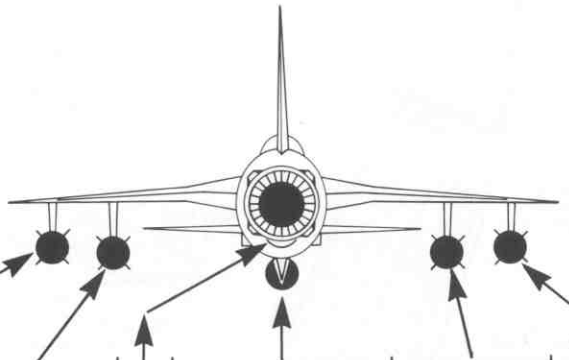
Wingspan	3
Length	6
Height	2
Weight	5
Engine	P
Maximum Speed	7
Service Ceiling	4
Maximum Range	1

1/72 S

By Kevin W

The names and artwork appearing on 355th TFW Thuds was often imaginative and well-done, though just as often lost in the dull green camouflage paint. For example, a shapely pin-up girl is outlined behind the name 'Mutt's Mano' War (above left), and "Daisy Mae" is only just apparent (above right). 'THE BALD EAGLE' is nearly invisible above the name (Right). (John Coon)

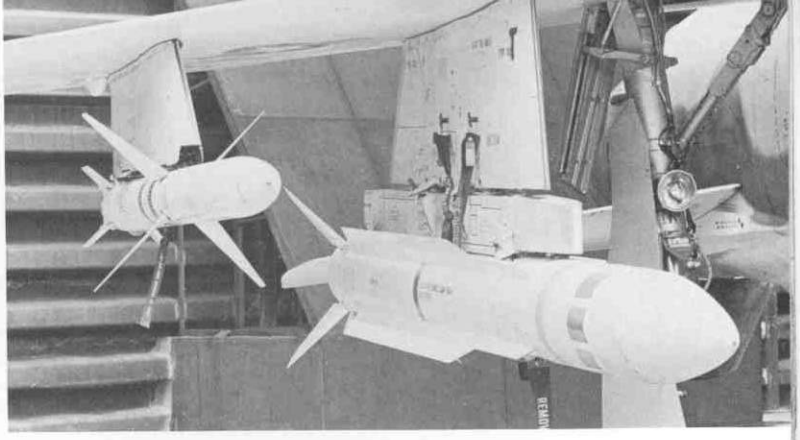
F-105 Thunderchief
STORE CARRYING
capabilities



STORE	APPROX WT (LB) FOR MORE EXACT WEIGHT FOR MISSION PLANNING REFER TO T.O. 1F-105D-5 OR T.O. 1F-105F-5.	LEFT OUTBD	LEFT INBD: MULTIPLE EJECTOR RACK	LEFT INBD: MULTIPLE WEAPON PYLON	LEFT INBD: CONVENTIONAL PYLON	BOMB BAY	CENTER PYLON: [D] MULT WPN (859) C/W	CENTER PYLON: CONVEN-TIONAL	CENTER MER: CONVENTION PYLON	CENTER MER: [D] MULT WPN (859) C/W	RIGHT INBD: CONVENTIONAL PYLON	RIGHT INBD: MULTIPLE WEAPON PYLON	RIGHT INBD: MULTIPLE EJECTOR RACK	RIGHT OUTBD
PYLONS	Outboard Pylon .....130 INBD PYLON { Conventional .....480; Multiple Weapon .....490; With MER .....615 CENTER PYLON { Without MER .....125; With MER .....325 Center Mult Wpn 340													
M-118 (3000 LB Bm) (30" Rack)	3,000			1	1						1	1		
M-117 (750 LB GP Bomb)	800	1	4	1	1		1		6	4	1	1	4	1
M-116 A-2 (Fire Bomb)	720	1	2	1	1				3		1	1	2	1
BLU-1B (Fire Bomb)	720	1	2	1	1		1		3	2	1	1	2	1
MLU-10B (Mine)	700	1	2	1	1		1		3	2	1	1	2	1
MC-1 (Chemical Bomb)	710	1	4	1	1		1		6	4	1	1	4	1
M-129 (Leaflet Bomb)	200	1	4	1	1		1		6	4	1	1	4	1
SPECIAL WEAPON	**T.O. 1F-105D-25D/F SERIES**			1		1	1					1		
SUU-7A/A (Dispenser) **CBU-1/A** 500 Bomblets each **CBU-2/A** 350 Bomblets each	Dispenser .....140 500 Bomblets .....610 350 Bomblets 610	1												1
MN-1A (Practice Bomb Disp) 6 Practice Bombs each	Dispenser .....470 6 MB-2/A Stores .....150 6 MK-76 Mod 2 Stores .....150 6 MK-106 Stores 30			1		1	1					1		
LAU/3A } (Rocket Launcher) **LAU/18A** } 19 Rockets each	LAU/3A Launcher .....70 LAU/18A Launcher .....95 19 Rockets 360	1	2	1	1						1	1	2	1
LAU-10/A (Rocket Launcher) 4 Rockets each	LAU-/10A Launcher .....105 4 Rockets 428	1		1	1						1	1		1
AIM-9B ADAPTER (Sidewinder) 2 Missiles each (2 AIM-9B, 2 TDU-11/B or 1 AIM-9B and 1 TDU-11/B)	Adapter .....150 2 Missiles 310	2												2
AGM-12B ADAPTER (Bullpup) 1 Missile each	Adapter ..... 120 Missile 570	1			1						1			1
390 GAL FUEL TANK	Bm Rack & Harness Removed .....60 Tank Support .....10 Tank .....200 Fuel 2535					1								
650 GAL FUEL TANK (With Integral Pylon)	Tank and Pylon .....340 Fuel 4225							1						
450 GAL FUEL TANK (Fletcher Tank & Pylon are integral)	Center { Tank: Republic 280, Fletcher 265; Fuel: 2925, 2925 Inbd { Rack: 235; Tank: 270, 330; Fuel: 2925, 2925				1			1			1			
MA-2 (Rocket Training Lchr) [D] 5 thru 15 2 Rockets each	Launcher .....25 2 Rockets 40	1			1						1			1
A/A37U-15 (Tow Target System) *Wt incl Pod, (2) Pylons & Tow Cable	TDU-10/B Dart Tgt & Adapter .....*1196 Tow Reel Pod 263						1							1
	K-11 Dart Tgt & Adapter .....*1206 Tow Reel Pod 263						1							1

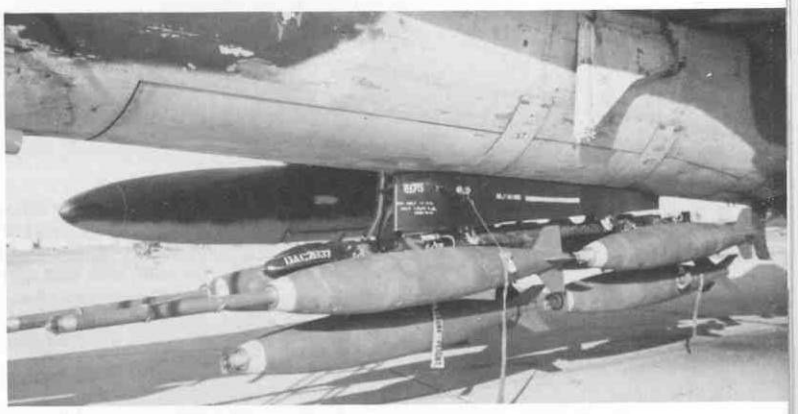
(Above) The MJ-1 bomb loader was the primary vehicle for up-loading and down-loading stores on the Thud. (John Coon)

(Below) Armament crew prepares a 355th TFW Thud to accept a load of 500 pound bombs. (John Coon)



(Above) The two primary anti-SAM weapons carried by Wild Weasel F-105F and G Thuds were the AGM-45 Shrike (left) and the AGM-78 Standard ARM (right). The Shrike was ten feet long and weighed 390 pounds. The Standard ARM was fourteen feet long and weighed 1,800 pounds. (Don Kutyna)

(Below) Armorer 'tailing' (arming tail fuse) a 500 pound bomb. (John Coon)

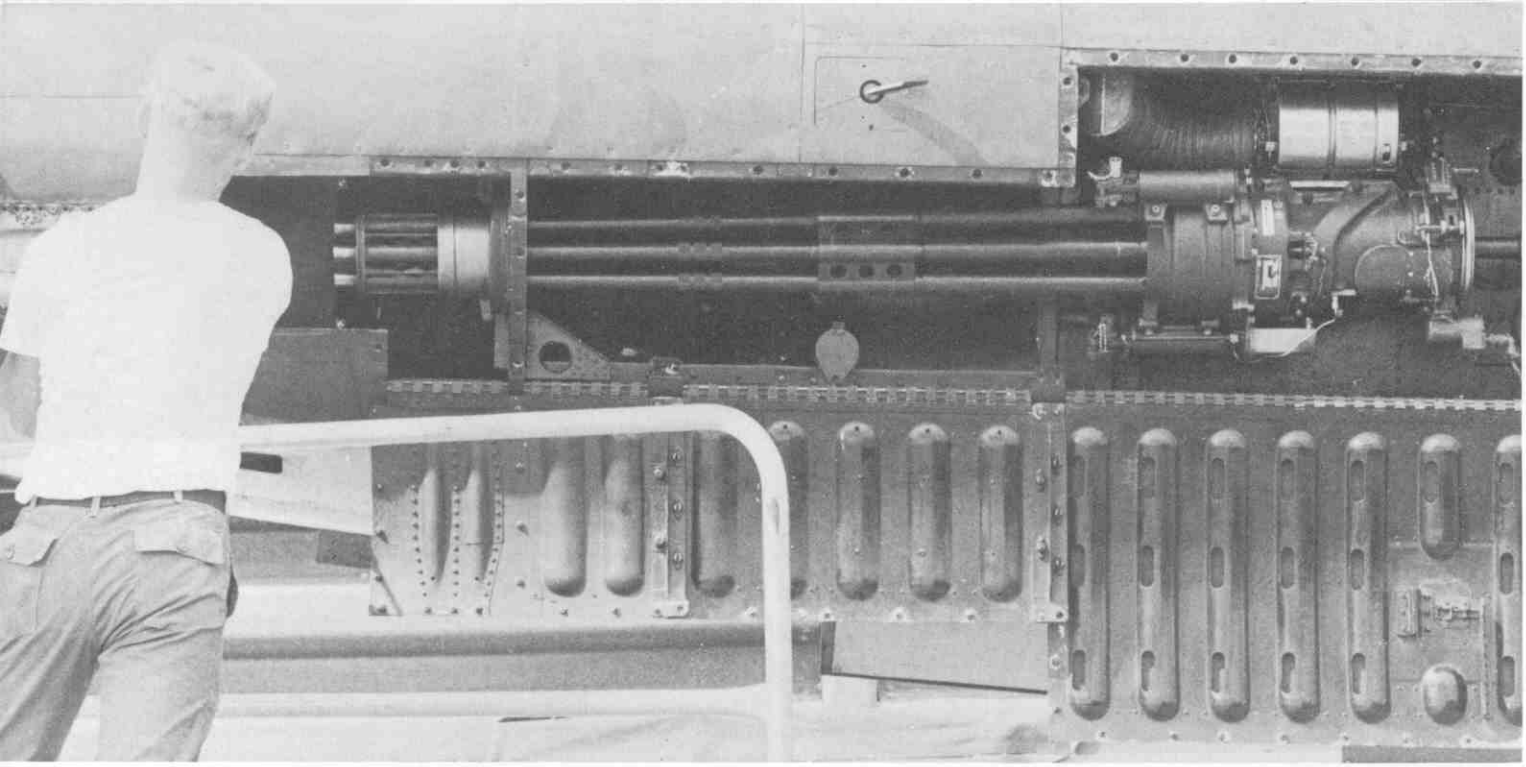


(Above) Six 500 pound bombs on the centerline. Two of the Mk82s have fuse extenders installed, which will ensure that they explode above ground. (John Coon)

(Below) 'The Glenna B.' of the 357th TFS carries a 650 gallon tank on the centerline, a 450 gallon on the inboard pylon and a Shrike missile on the outboard pylon. (John Coon)

(Above) 355th TFW armorer putting the finishing touches on a 500 pound bomb fuse extender. (John Coon)

(Below) A favorite weapon of the Wild Weasels was the CBU (cluster bomb unit) as dispensed by the SUU-30. The CBU was an effective weapon against SAM site crews.

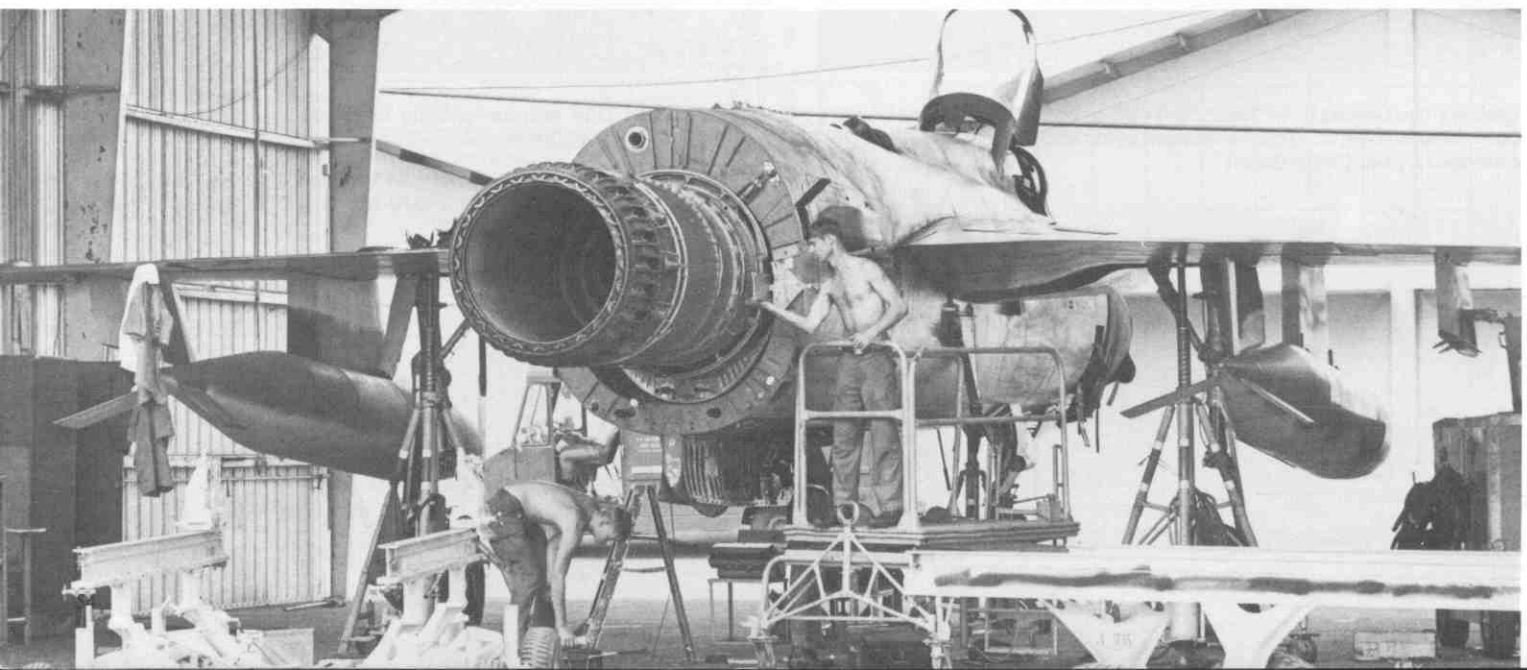


(Above) The six barrel 20mm cannon mounted in the nose of the Thud was capable of firing up to 6,000 rounds per minute, and was effective against MIGs and deadly as a strafer. (Don Kutyna)

(Left) Electronics bay (rear) and battery compartment (forward) are opened up on a Thud of the 355th TFW. (John Coon)

(Right) The F-105 Thunderchief was a BIG airplane, and most ground crews needed help to reach the various panels. (John Coon)

(Below) Most of the heavy maintenance, such as this engine change, was done in open-ended hangers at Takhli, keeping ground crews dry in the monsoon season, and in the shade at other times. (John Coon)

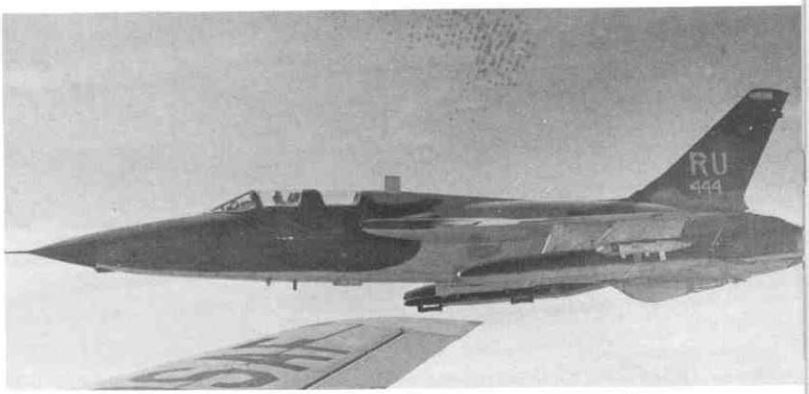


544th Tactical Fighter Squadron – VAMPIRES

RE tail code, Black radar reflector (reassigned from 388th TFW October 1969). Aircraft names on intake, Silver letters, Black background. Crew names on canopy Silver letters on Black background.

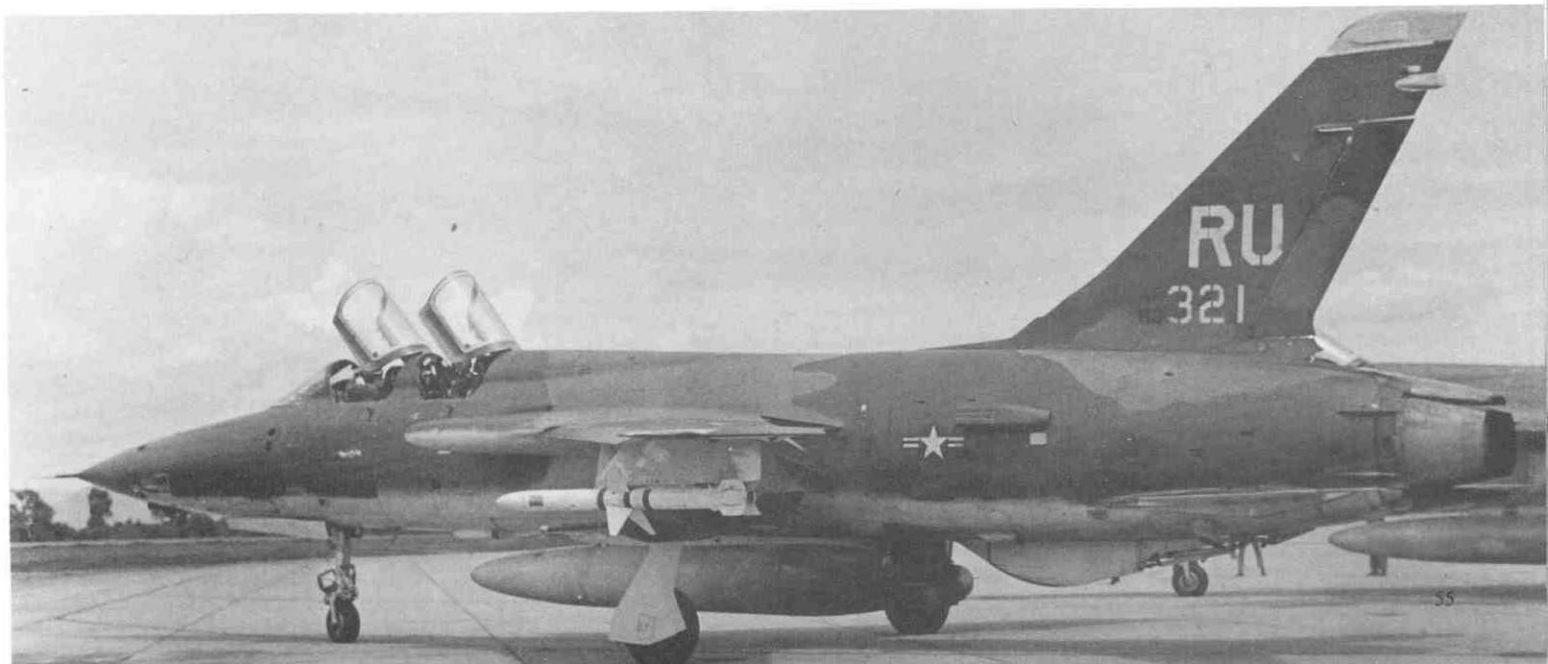
AIRCRAFT TYPE	SERIAL NO	REMARKS
F-105D-10-RE	60-0488	MY AZZ IS DRAGON (fuselage below cockpit). THE SPANISH FLY (intake) AQUARIUS (intake).
F-105F-1-RE	63-8302	JEFFERSON AIRPLANE (intake). HALF A YARD (intake).
F-105F-1-RE	63-8319	LINDA JEAN (intake). SINISTER VAMPIRE (intake).
F-105D-20-RE	61-0161	LIL CHERYL (intake). Previously ABOVE AND BEYOND (intake).
F-105D-31-RE	62-4361	CHRISTIE (intake).
F-105D-6-RE	59-1759	MY DEE (Thai word meaning "ANGRY" – fuselage below wing). ROSA L (both intakes).
F-105D-20-RE	61-0153	LI'L LULU (intake). Previously CAROL (intake).
F-105F-1-RE	63-8349	MT IDA FLASH (intake). HONKY TONK WOMAN (intake).
F-105D-15-RE	61-0076	THE CAVALIER (intake). Previously THE ROBIN (both intakes).
F-105F-1-RE	63-8329	ROSEMARYS BABY (intake). Shot down 28 January 1970 by AAA along Laos/North Vietnamese border.
F-105D-6-RE	59-1822	THE POLISH GLIDER (both intakes). YANKEE AIR POLACK (fuselage below cockpit artwork polish eagle on Red shield). Assigned to Major Don Kutyna.
F-105D-5-RE	59-1739	
F-105D-15-RE	61-0093	GOOD VIBRATIONS (both intakes).
F-105D-15-RE	61-0086	BIG SAL (both intakes).
F-105D-6-RE	59-1760	THE UNDERDOG (fuselage below cockpit). Previously LEMON SUCKER (fuselage below cockpit).
F-105D-30-RE	62-4242	BATCHELOR II (both intakes). Previously April K (intake). MISS WORLD (intake). Previously ANIMAL (both intakes).
F-105D-30-RE	62-4248	THE GOBBLER (intake).
F-105F-1-RE	63-8327	AQUARIUS (intake) previously SWEET CAROLINE (intake).
F-105D-10-RE	60-0464	M.J. (both intakes).

(Above) Thuds from the 333rd, 357th, and 354th TFS make up a flight for the 355th TFW. It was not unusual for aircraft to be drawn from different squadrons to make up a combat flight. (USAF)



(Above) This F-105F of the 357th TFS was one of a few two seated Thuds that had the rear seat removed and replaced with a QRC-128 jammer to jam voice communications between North Vietnamese GCI controllers and their MiGs. The program was dubbed 'Combat Martin'. (USAF)

(Below) Wild Weasel Thud of the 357th armed with Shrike missiles and a 750 pound bomb with fuse extender. One seven fifty exploding above ground in the middle of a SAM site would decimate the entire site crew. (USAF)



(Above) 'FAT FANNY' was a Weasel of the 333rd TFS. (USAF)

F-105 Losses in Southeast Asia

The air war over North Vietnam devastated the F-105 fleet through steady attrition. Of the 833 Thuds built, 382 were lost from 1965 to 1972. The losses were not all directly related to combat, but were losses nontheless. Broken down by year, they occurred as follows:

YEAR	COMBAT	OPS	TOTAL
1965	60	8	68
1966	111	16	127
1967	87	15	102
1968	34	12	46
1969	14	5	19
1970	7	3	10
1971	1	—	1
1972	7	2	9
	321	**61**	**382**

(Above) By the time this aerial view of Takhli RTAB was taken in 1972, Phantoms had replaced Thuds on the flightline, but little else had changed since Rolling Thunder. (USAF)

(Below) When the 355th TFW was deactivated, the AGM-78 capable F-105Fs were retained in Southeast Asia, and used to form up a new unit at Korat RTAB; the 6010th Wild Weasel Squadron was activated provisionally on PACAF orders. This F of the 6010th was photographed at Phu Cat AB, RVN in June of 1971 by Norman E Taylor.

(Above) F-105F of the 333rd TFS slides into position behind a KC-135 post strike. (USAF by 1/LT Raymond P Graham)

(Above) The 6010th WWS operated with ZB tail codes until December of 1971, when it was redesignated the 17th Wild Weasel Squadron and got the new tail code of JB. This F-105F is seen at Phu Cat AB in May of 1971. (Norman E Taylor)

(Above and Above Right) The F-105F (above) was replaced by the F-105G (Above Right) as the premier Wild Weasel aircraft in 1972. (USAF)

(Below) F-105F of the 562nd TFS, 35th TFW at George AFB, California, 1972.

(Above And Above Right) The principle external difference between the F-105F and G models was the installation of AN/ALQ-105 jamming pods on the lower fuselage sides. An AN/ALR-46 RHAW system was also installed. Sixty-one F-105Fs were converted to G standards. (Republic)

(Above) F-105G of the 17th Wild Weasel Squadron, Korat RTAB in January 1973. It carries the inscription 'THOR'S HAMMER' under intake, with silhouette of hammer. (D Remington via Norman E Taylor)

(Below) 'PATIENCE', an F-105G of the 17th WWS at Korat in January of 1973. The refueling probe forward of the windscreen is partially open. (D Remington via Norman E Taylor)

'S NAGGLE TOOTH', an F-105G of the 17th WWS at Korat in August of 1973, carries the seldom-seen twin AGM-45 Shrike mount on the outboard wing station. (Jerry Arruda via Norman E Taylor)

(Above) F-105Gs of the 17th WWS at Korat in November of 1972, in the hiatus between OPERATIONS LINEBACKER I and II. (D Remington via Norman E Taylor)

(Below) F-105G of the 17th WWS, 388th TFW at Korat in January of 1973. Electronics of the F-105G were so extensive, and the maneuvering to identify, avoid, and attack perceived threats required so much 'G', that they taxed the Electronics Warfare Officer (Bear) to the limits of his mental and physical abilities. (D Remington via Norman E Taylor)

17th Wild Weasel Squadron

Detachment 1 of the 12th TFS was formed during the fall of 1970 at Korat RTAB from the AGM-78 capable F-105s that had been left behind by the deactivated 355th TFW. By November of 1970 enough Wild Weasel F-105s were on hand at Korat to form the 6010th Wild Weasel Squadron (a provisional unit activated on PACAF orders). On 1 December 1971 the 6010th was redesignated the 17th Wild Weasel Squadron (WWS). The conversion of F-105Fs to G standards had been mandated by Air Force TO-1133, dated 23 February 1970. This change had been accomplished by the time OPERATION LINEBACKER began, and strike forces again began going to Route Package Six. In response to the Easter 1972 North Vietnamese invasion of South Vietnam, Detachment One of the 561st TFS deployed from McConnell AFB, Kansas to Korat RTAB with twelve F-105Gs. This deployment took place between 7 and 12 April 1972 under the name "Constant Guard I".

When USAF units were being withdrawn from Southeast Asia, the 17th WWS was one of the last to be deactivated (1 November 1974).

(Below) When the war ended, the surviving Thuds returned to the United States. This flight is returning from the range at McConnell AFB. (Don Kutyna)

F-105G Aircraft of the 17th WWS

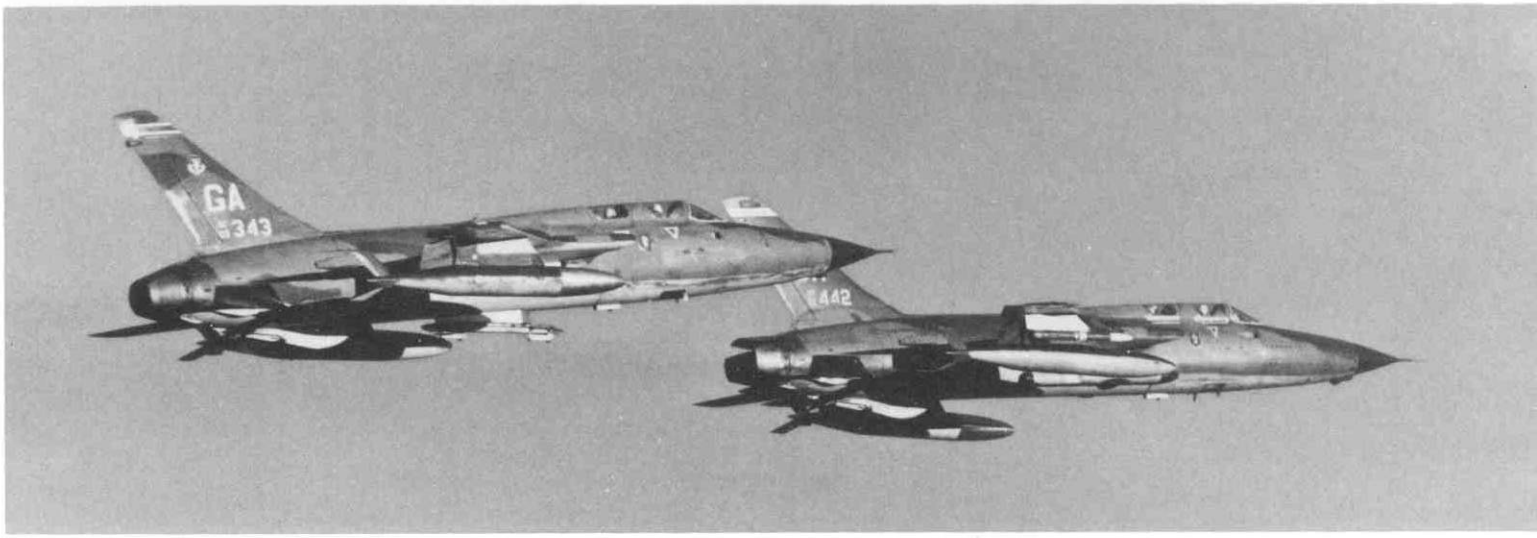
62-4416	
62-4423	
62-4424	Lost over North Vietnam 11 May 72, crew held POW.
62-4425	
62-4442	Artwork: name "Frenk" on nose.
62-4443	Lost at sea 29 July 72, crew rescued
63-8339	
63-8266	Artwork: While Lightning" on nose
63-8275	
63-8291	Artwork: "Muttley The Flying Dog" on both intakes.
63-8300	
63-8302	Lost over North Vietnam 29 Sept 72, crew held POW and MIA.
63-8316	
63-8321	
63-8326	Lost over Loas 10 December 71, crew rescued
63-8333	Lost at sea 17 Feb 72, crew held POW.
63-8334	
63-8342	Lost over North Vietnam 15 April 72, crew held POW.
63-8360	Lost at sea 17 Sept 72, crew KIA.

F-105G Aircraft Deployed from McConnell AFB Det 1, 561st TFS

62-4434
63-08304 Name "Mad German Express" on intake panel.
63-8265
63-8332
63-8319
63-8320
62-4428 Name 'Red Ball" on intake panel.
63-8285 Name "Peggy II" on intake panel.
63-8313

(Above) F-105G of the 562nd TFS, 35th TFW at George AFB, California 30 May 1980. (Jerry Arruda via Norman E Taylor)

(Below) F-105Gs of the 35th TFW take off from George AFB in November of 1978. (Shinichi Ohtaki)



(Below) F-105G of the 35th TFW taxies at George in December of 1977. (Shinichi Ohtaki)

(Right) F-105D-31-RE belonging to the 149th TFS, of the Virginia Air National Guard at Byrd Field, Sandston, VA on 27 April 1976. It carries an SUU-20 practice bomb dispenser on the centerline. (Jim Sullivan)

(Above) F-105G of the 128th TFS, Georgia ANG, Dobbins AFB, GA on 25 March 1981. (Norman E Taylor)

(Above) F-105F of the Air Force Systems Command at Eglin AFB in May of 1972. This aircraft carries an overall Gray paint scheme. (Author)

(Below) F-105G of the 128th TFS, Georgia ANG, taxies at Shaw AFB, SC on 11 February 1982. It features wrap-around camouflage, and is carrying a captive Shrike, 450 gallon tanks, and a traveling pod is on the centerline. (Norman E Taylor)

(Above) F-105G of the 128th TFS with the 390 gallon bomb bay tank lowered for maintenance. 26 March 1981. (Norman E Taylor)

EPILOG

The Thud soldiered on long after the end of USAF's participation in the Vietnam air war. Serving with Air National Guard and Air Force Reserve units. The first of the returning Thuds went to the 23rd TFW at McConnell AFB, which was the RTU for the Thunderchief. The training mission was eventually absorbed by the 184th TFTG of the Kansas ANG at McConnell. ANG units from New Jersey, Georgia, Washington DC, and Virginia and AFRES units from Texas, Utah, and Oklahoma flew the F-105 in diminishing numbers until its last, historic flight in 1983.

(Below) F-105G of the 128th TFS with its replacement, an F-4D. The 128th was last unit to operate the Thud, making their last Thud flight on 25 May 1983. (Norman E Taylor)

F-105 of Captain John Piowaty diving on the Paul Doumer Bridge in downtown Hanoi.

ISBN 0-89747-171-7

Lou Rehkopf
©1985